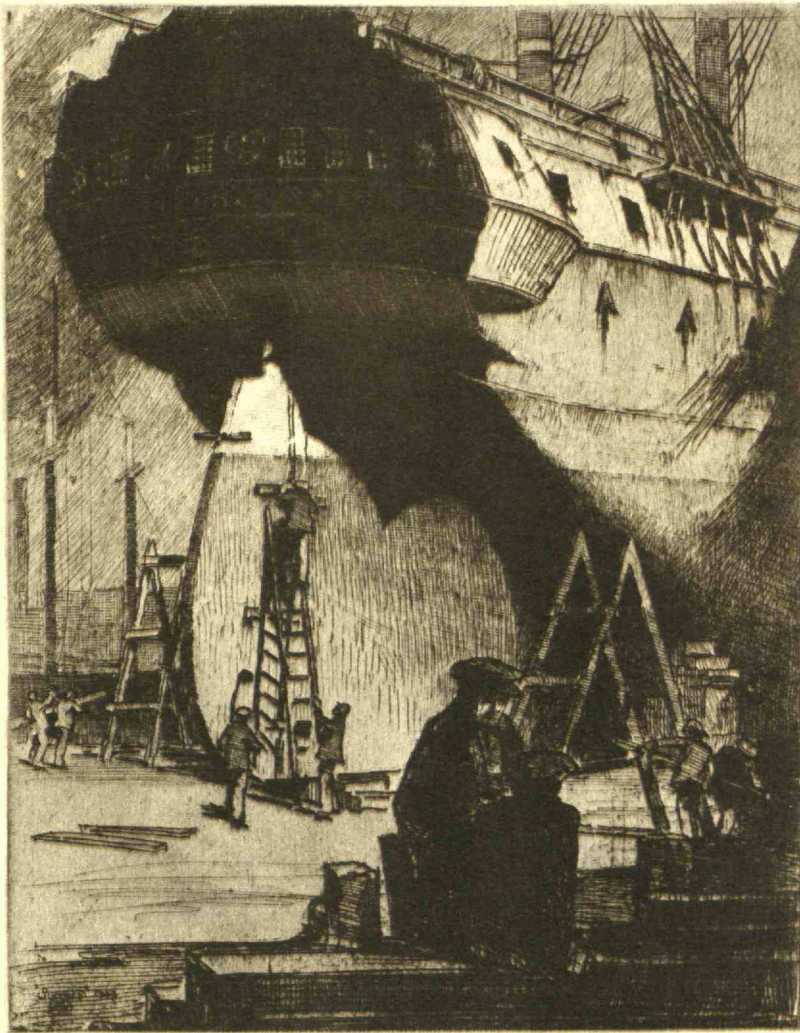


The March TECHNOLOGY REVIEW

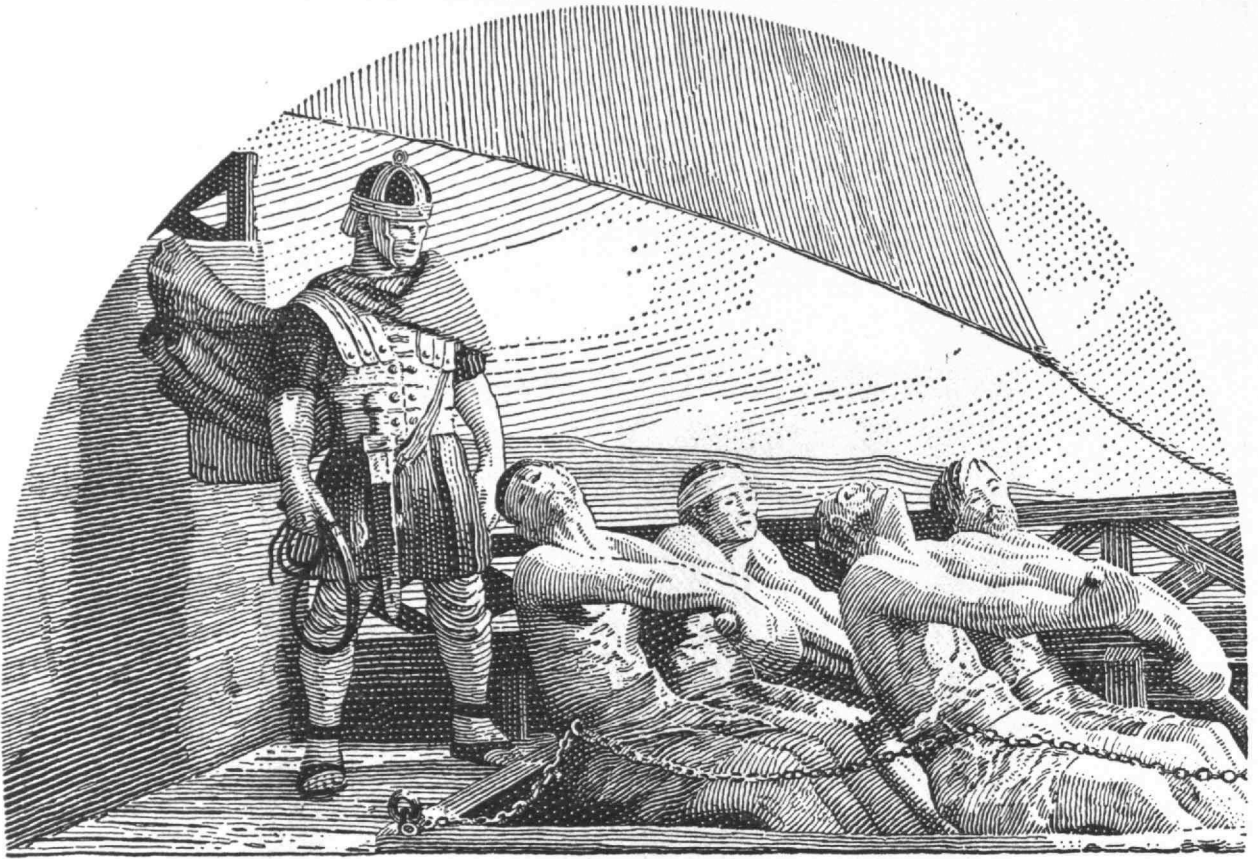


RELATING TO THE MASSACHUSETTS
INSTITUTE OF TECHNOLOGY

technology review

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The TECHNOLOGY REVIEW

Relating to the Massachusetts Institute of Technology

VOLUME XXX



NUMBER 5

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J. J. ROWLANDS }

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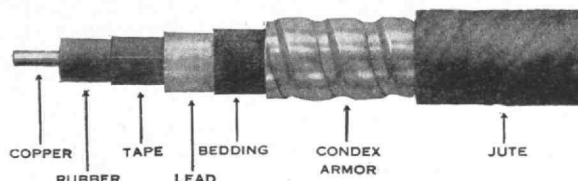
Where Will He Prepare for College?

❑ WHETHER your boy goes to Technology or to some other college with high standards, you must decide where he shall prepare himself. Realizing that this problem confronts many of its readers, The Review is enlisting the coöperation of the leading preparatory schools of the country, and on page 325 of this issue it starts a list of reliable accredited schools which prepare boys for college.

❑ SHOULD you be interested in any one or all of these schools, a letter to us or to the individual schools will bring you detailed information.

❑ "SCHOOLS," we anticipate, will be an increasingly valuable feature of The Review.

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The Tabular View

FLEDGLINGS now at the Institute are alone in being unaware that the ingeniously contrived crossword puzzle arrangement whereby the Registrar makes formal, if not accurate, prophecy, when and where classes are to be held, was once called The Tabular View. The same publication has come under the influence of a staid, time-table philosophy and consequently now masquerades under the flavorless title, "Class Schedules." The Review Editors decry this change. To prove that they decry it they have assumed the responsibility of exhuming The Tabular View of tender memories, and of breathing into it new life. To wit, this new department of trivia and momenta about men and things needed a title, so what was more fitting than to recall a veteran? We started to say, preserve a tradition but for that we should be fired upon before the whites of our eyes were seen.

SETH K. HUMPHREY, '98, not at present traveling, dwells in his Beacon Hill apartment surrounded by his travel trophies, not the least of which is an exquisite table of inlaid colored woods obtained at Damascus. We stalked him to his lair and discovered him hard at work on a book which is to narrate at length the African trip he writes of in his article on page 279. ¶ FRANK B. JEWETT, '03, now President of one, and Vice-President of another, large corporation, who writes on education in this issue, was once an instructor at Technology. ¶ In the Book Department appears three prominent contributors. HENRY L. SEAVER, of the Institute's Department of English and History, lectures far and wide on many phases of the Fine Arts. ¶ The first and only man to complete an outside loop and come through alive is LT. JAMES H. DOOLITTLE, S.M. '24, who reviews Professor Warner's book on Aërodynamics. ¶ ROBERT E. HORTON is a prominent consulting hydraulic engineer of Voorheesville, N. Y.

WE HAVE just been reading Roy Chapman Andrews' "On the Trail of Ancient Man," and he has much to say about FREDERICK K. MORRIS, geologist on the three Asiatic Expeditions into Mongolia, and author of the paper on racial biology published in February. Andrews avers that, in a time of dire need, when cloth was needed to wrap fossils and dinosaur eggs, Professor Morris, after serious thought, donated one of the two pairs of trousers he owned. ¶ Already The Review has recorded the appointment of CHARLES G. ABBOT, '94, as Secretary of the Smithsonian Institution. He contributed the article on solar radiation which appeared in the December issue, despite the fact that *The Tech* once called him an astrologer. ¶ WILLIAM F. JONES, '09, stuck his head into the office recently. With esoteric allurements he was decoyed into the sumptuous inner office, seated, surrounded with pillows, given a footstool, and allowed to furnish his own cigarettes. Thus he was induced to relate a few more of his experiences in Latin and South America. Richard Harding Davis is dead but Professor Jones still lives.

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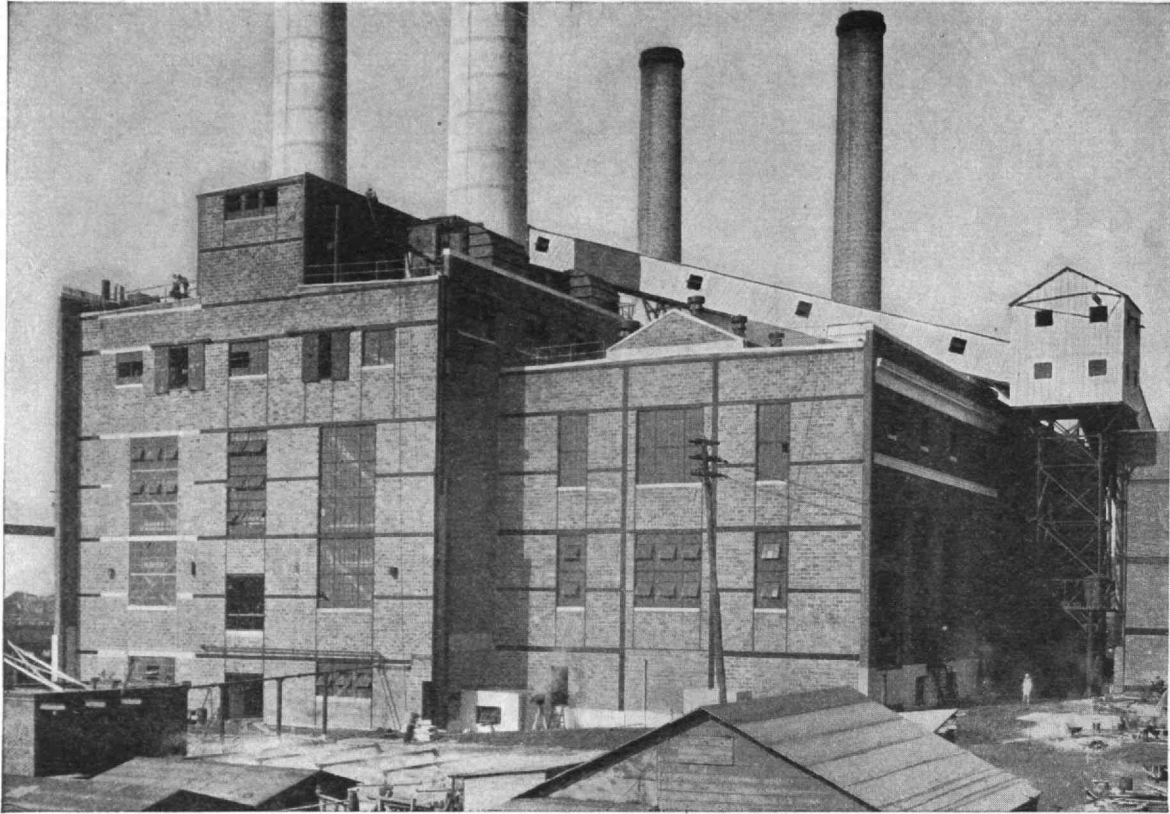


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The TECHNOLOGY REVIEW

VOLUME 30

MARCH, 1928

NUMBER 5

The Trend of Affairs

OF utmost importance to the Alumni Association is the slate of officers chosen by the Nominating Committee to pilot the alumni ship of state through another fiscal season. The Nominating Committee is, in fact, an electoral college, since it chooses only one candidate for each office in the Association; though, as recorded later on, in the matter of Term Memberships in the Corporation it submits nine names (see next page) from which the alumni body politic selects three, for transmittal to the Corporation for formal election by that body.

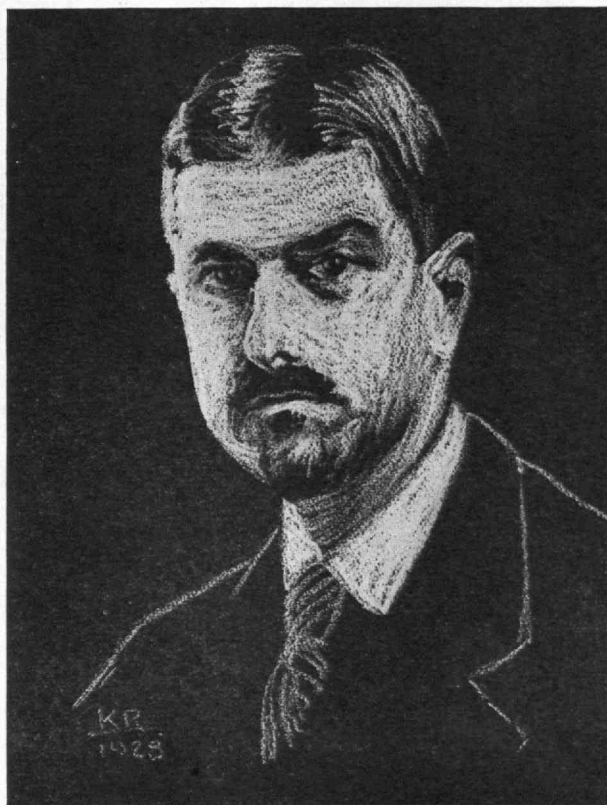
To follow Samuel C. Prescott, '94, as President of the Association, the man presented is Alexander Macomber, '07, of the firm of Macomber and West, Engineers, Boston. Mr. Macomber long and actively has been associated with alumni affairs: for fifteen years, ending in 1927, he was chairman of the Alumni Advisory Council on Tech Show, and for many years was a member of the Alumni Council. Incidentally, he is to be the first President chosen from a Class later than 1895, the next youngest man by class seniority to hold office being Thomas B. Booth, who was President during 1923-24.

His accession to office will terminate the unprecedentedly long directorship of Professor Prescott who, not only as President this year, but as Vice-President the two preceding years under out-of-town Presidents, has been, so to speak, constantly in charge of operations. Professor Prescott, however, will continue active in the affairs of the Association, since the Nominating Committee decrees his election to the Executive Committee for two years along with Edward B. Rowe, '06, valuation engineer with O'Brien, Russell and Company, Bos-

ton. The two retiring members of the Executive Committee are Edward L. Moreland, '07, and Harold B. Richmond, '14. Mr. Richmond, Treasurer of the General Radio Company, Cambridge, becomes Vice-President for two years, the continuing Vice-President being George E. Merryweather, '96, of Cleveland, Ohio.

Five more names are on the nominal ballot. They are the Members-at-Large of the Alumni Council, a group geographically distributed throughout the land: Walter E. Hopton, '91, Syracuse, N. Y.; Howard S. Morse, '03, Indianapolis, Ind.; Hermann C. Henrici, '06, Kansas City, Mo.; Stuart R. Miller, '07, Cincinnati, Ohio; George A. Chutter, '21, Schenectady, N. Y.

Ballots will be mailed out March 20 from the Alumni Office and are due back on April 20. Announcement of the result of the voting will be made soon thereafter. Of course, only the Corporation Nominees (see next page) are dependent upon the balloting.



Drawn by Kenneth Reid, '18

ALEXANDER MACOMBER, '07

As the sole nominee, he will become President of the Alumni Association for the 1928-29 term beginning July 1

131st Meeting

DEMI-TASSE cups and cheroots having been whisked away to storage for another month, the 131st Meeting of the Alumni Council, held in Walker Memorial on January 23, quickly dispatched its routine business under the skillful direction of its President, Samuel C. Prescott, '94. (1) Secretary-Treasurer Orville B. Denison, '11, proclaimed the Executive Committee's acceptance of his resignation; (2) Henry F. Bryant, '87, chairman of the Dormitory Fund Campaign, announced the establishing of a quota for each of the classes; and (3) a committee headed by Dr. Allan W. Rowe, '01, having prepared a resolution, the Council whereased to Mr. Denison

Corporation Nominees

NINE men each year are chosen by the Nominating Committee and presented to the constituency of the Alumni Association for it in turn to select three from the nine as candidates for Term Membership on the Corporation, legal governing body of the Institute. The Corporation, now largely composed of Alumni, invariably has accepted and welcomed these nominees. The group this spring from which the Association chooses the three who will take office for five years beginning July 1, are composed of the following, arranged by class seniority:



Left, from top to bottom
WILLIAM E. NICKERSON, '76 ✓

Vice-President, Gillette Safety Razor Company, Boston



HENRY F. BRYANT, '87
Consulting Engineer, Brookline

CHARLES G. MERRELL, '88
President, Wm. S. Merrell Company, Cincinnati, Ohio

WILLIAM H. BASSETT, '91
Technical Superintendent and Metallurgist, The American Brass Company, Waterbury, Conn.

Bottom center
CHARLES G. ABBOT, '94
Secretary, The Smithsonian Institution

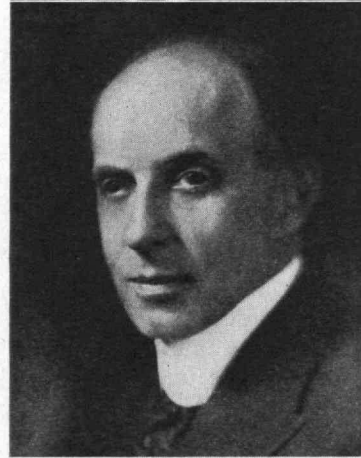
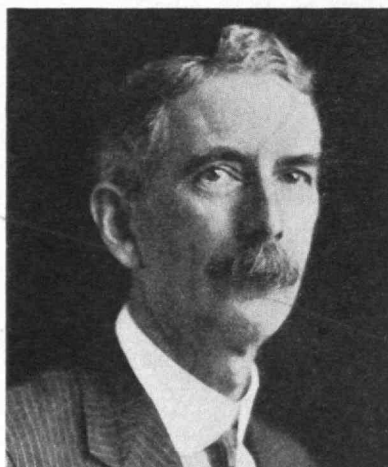


Right, from top to bottom
ALBERT B. TENNEY, '94
Vice-President, Charles H. Tenney and Company, Boston

LAMMOT DU PONT, '01 ✓
President, E. I. duPont de Nemours and Company, Wilmington, Del.

FRANK B. JEWETT, '03 ✓
President, Bell Telephone Laboratories, Inc., New York

REGINALD A. WENTWORTH, '04
Manufacturing Manager, The Barrett Company, New York



its thanks for his services in the past and its wishes for his success in the future.

All this took but a moment and the Council next found itself listening to Dr. John A. Rockwell, '96, chairman of the Advisory Council on Athletics, describe the protective bulwarks that the past thirty years have seen thrown up to guard the health of the college man who would indulge in athletics. At Technology and at most other schools, said Dr. Rockwell, it is now a physician and not a victory-seeking coach who determines the fitness of the would-be athlete. Dr. George W. Morse, head of the Institute's Department of Hygiene, traced its growth from the dispensary, set up to care for accidents when the new Technology was being built, to the almost-completed Richard M. Homberg Memorial Infirmary — thus bringing up to date Dr. Rowe's "The Care of Student Health," published in *The Review* for January, 1925. With examples and instances, he sketched how his Department — the largest at the Institute because it includes Faculty, students, and employees — was caring for Technology health. He expected that additional facilities in the new Infirmary would permit the requiring of a physical examination for every senior such as is

now given to all first-year men; urged that physical examinations be conducted for all students at least once each year; and hoped that some time the Institute would require a definite standard of physical fitness in each candidate before awarding him a degree. To Professor Edward F. Miller, '86, a member of the Administrative Committee at the time the present health program at Technology was begun, Dr. Morse gave the credit for instigating the work, but Professor Miller, when his turn came, gracefully passed back the bouquet to Dr. Morse.

Secretary-Treasurer Denison, in his printed program, heralded the last speaker as follows: "... we shall have ... Dr. ... Rockwell on certain phases of the physical care of the athlete, Harry J. Carlson, '92, on the architectural arrangement." Mr. Carlson, be it said, overlooked anatomy to discuss architecture and passed around the plans for the new building so that each might see for himself where the two five-bed wards, the dental clinic, and the solarium were to be located.

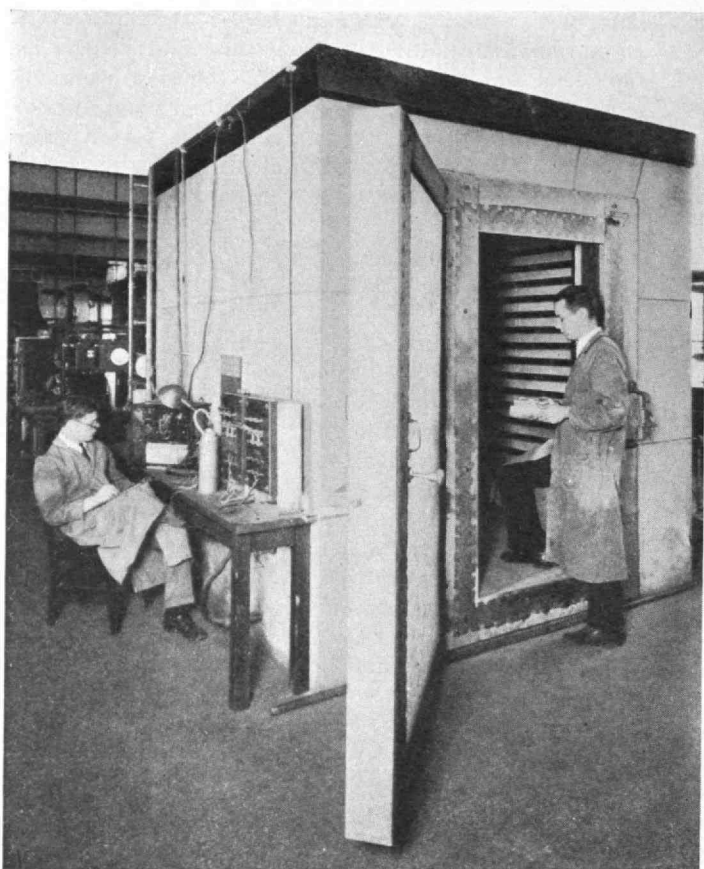
Chairman Prescott, to make sure that discussion was directed into the proper channels, had chosen Dr. Rowe to lead it off. In a short peroration, that gentleman



AND WHEN THE PIE WAS OPENED

© Underwood and Underwood

When this 3,500-pound piece of optical glass was uncovered at the Bureau of Standards, it was found to have successfully survived its thirty-six-week cooling period. Dr. George K. Burgess, '96, Director of the Bureau of Standards (on the right), and President Stratton (second from the left), attended the "unveiling" of this, the largest piece of optical glass ever cast in this country



HOT OR COLD

The Department of Physics recently used this temperature control chamber to study the effect of low temperatures on insect pests

alluded to the oft-discussed architectural insufficiency of Walker Memorial; paid tribute to the high-mindedness of the coaches in Technology's athletic sports, and made an impassioned plea for an annual physical examination for all students. So inflamed did the Doctor become that he offered to the Council a resolution (his second that evening) asking that the Corporation turn an appreciative ear toward the Council and require an annual physical examination for every student. This, needless to say, the Council passed. Others fired questions at the speakers, among them Professor C. Frank Allen, '72, who wormed from Dr. Morse the soul-soothing information that the scholastic load upon the student produced no noticeably deleterious influence upon his health. And the smallest Council Meeting of the year adjourned.

Two Courses

THE fecundity of the Institute's Course Incubator continues unabated. Special Courses in Ship Operation and in School Health Administration are now being developed by the Department of Naval Architecture and Marine Engineering and by the Department of Biology and Public Health. The course in Ship Operation is planned specifically for shipping administrative officials, masters, engineers, and deck officers who desire more technical knowledge of their profession.

Lawrence B. Chapman, '10, Associate Professor of Ship Operation and Marine Engineering, is to give Courses in Marine Engineering and in Terminal Facilities and Cargo Handling. The former deals with the economical operation of marine power plants and a comparison of different types of propelling machinery and auxiliaries. Instruction in terminal facilities and cargo handling includes studies of the layout of piers and transit sheds, railroad and truck facilities, port and ship equipment, and the design of the ship with reference to cargo handling.

Clair E. Turner, '17, Associate Professor of Biology and Public Health, will be in charge of the Course in School Health Administration. In addition to its value for undergraduate instruction, it will include subjects of wide interest to school health officials, teachers and social welfare workers. The benefits of coöperation between the various agencies engaged in school health work will be shown, and Dr. Turner, who recently organized a school health program for the City of Cleveland, will discuss the curriculum in health education, the problems of administration, and the cost of health education.

Moth Pogrom

OUT of patience at the continued failure of many of the customary varieties of New England winter weather to put in appearance, Gordon B. Wilkes, '11, Associate Professor of Industrial Physics, early last month made artificial winter weather, ranging from a mild day to thirty degrees below zero, in order to study the effects of low temperatures on certain insects which cause great losses in forest and orchard. In all he marshaled nearly a quarter million Lepidoptera for a five-day test, the manoeuvres being carried out in coöperation with the United States Bureau of Entomology, which has a nearby laboratory at Melrose.

The gypsy-moth, attacker of shade trees, furnished the largest delegation, having an estimated attendance of 120,000. Thirty-five thousand larvae of the brown-tail moth, lovers of fruit as well as shade trees, came next, accompanied by 400 webs of the satin moth, defoliators of willows and poplars, and 400 cocoons of the oriental moth, allies of their brown-tailed relatives. All of these are foreign interlopers, having been introduced accidentally into the United States from abroad.

For comparative purposes several species of native insects were summoned. These included 40,000 eggs of the eastern or apple tree tent caterpillar, about 12,000 eggs of the forest tent caterpillar, some 25,000 eggs of the tussock moth, and eighty cocoons of the promethea moth. Bringing up in the rear were forty lots of apanteles, a beneficial insect and enemy of the injurious species, in order that the limits of their working range under the rigors of a New England winter might be observed.

On the first day of the experiment the chamber containing the insect specimens, all of which were in the

hibernating form, the stage in which they usually pass the winter, was cooled to a temperature slightly lower than that prevailing outdoors on that day. Each succeeding day the temperature was reduced still lower until, on the fifth day, the thermometers registered thirty degrees below zero.

The process, however, was not a continuous and steady loss of heat, or lowering of temperature. As such conditions never occur in nature, the greatest care was exercised to simulate natural conditions as closely as possible. This was accomplished by slowly lowering the temperature to reproduce the conditions of night and allowing it to rise as it does in nature during the day.

By these experiments and future studies, which are part of a scientific campaign to prevent the further spread of insect pests, it may be possible to forecast the relative abundance of some of these insects following severe winters. In addition to such vital statistics, Professor Wilkes and his colleagues may be able to determine how low the mercury must go to kill them all. If so, The Review devoutly hopes that next winter will be a humdinger.

Hence the Pyramids

MAJOR Albert S. Smith, Superintendent of Buildings and Power, is an able and active administrative officer as has been pointed out many times before in The Review. Although the Major, Pluto wot, is entirely unconcerned about midyears, February is one of the twelve busiest months he has each year. Ordinarily he spends it on seemingly futile, but nevertheless ultimately triumphant, efforts to dig the Institute out of snowdrifts; meanwhile fussing and fretting in his botanical laboratory in search of the Golden Fleece — to him grass that can be made to sprout and bloom luxuriantly on the pebbles of that Sahara, Eastman Court.

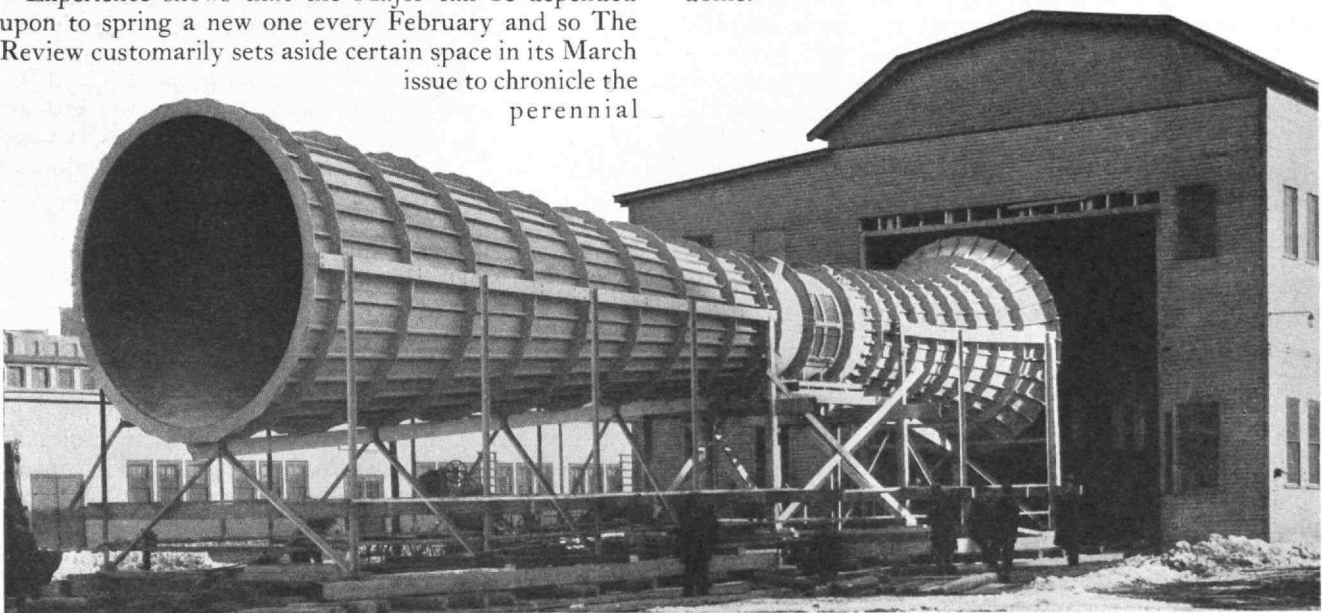
Experience shows that the Major can be depended upon to spring a new one every February and so The Review customarily sets aside certain space in its March issue to chronicle the perennial

feat. Rarely does the Major disappoint and this year he moved a wind tunnel. Plans were shrouded in secrecy, but a series of "graveyard rumors" kept a curious and expectant throng of cinematographers and would-be innocent bystanders on the *qui vive*. For a wind tunnel is a capricious monster, and to move one is a hazardous undertaking. Carefully housed and tenderly sheltered, wind tunnels are not cravenetted, and, being designed to suck a gale through their innards, they may reasonably be expected to resent thwartship puffs from stray breezes.

So it was, on the eve of February 3, that a gang of transport technicians, some of whom were veterans of the great 1916 heira from Boylston Street to Cambridge, assembled with the impedimenta of their craft, under the careful shepherding of the Major. Skillfully camouflaged they awaited the dawn.

If it broke clear and calm they would bash in the side of the temporary wooden building behind the Dome, hook on the wind tunnel, and begin to haul it toward Massachusetts Avenue. About mid-afternoon they would turn it cautiously ninety-seven degrees on its vertical axis so as to head it into a breach in the south wall of the new Guggenheim Aeronautical Laboratory. Before midnight the wind tunnel would find itself inside its new home. Since it did break clear and calm it is unnecessary to speculate on what the Major would have said and done if it had not.

Thus it was that the second anniversary night of the Great Blizzard (see The Review for February, 1926) found the Major on his way home to celebrate. Not only had he confounded the elements but the Dorm Goblin as well. For another graveyard rumor had it that this mysterious force, which puts Ford cars in cellars and on roofs and transfixes a dormitory with a telegraph pole, would see to it that the wind tunnel was moved by Valentine's Day, if the Major failed to act, into the basement of one of the dormitories or else up on the dome.



GABRIEL'S TRUMPET:

The photographer snapped this picture in the early morning light, just as the eighty-one foot wind tunnel moved out of its old home on its way to the new Daniel Guggenheim Aeronautical Laboratory



Wide World

HENRY E. HUNTINGTON LIBRARY

This building in Pasadena, Calif., was designed by Myron L. Hunt, '93, winner of the 1927 Arthur Noble Medal

Motor Respiration

An eager press has left no type untouched to tell the story of Colonel Charles A. Lindbergh. His words and acts, the pie he likes, the clothes he wears, the color of his eyes and ties have been described a thousand times. Nor has his plane gone unrevealed in minute detail.

But the journalistic stars of the world overlooked one bit of information and it remained for Charles F. Taylor, Associate Professor of Aëronautical Engineering, to reveal how much air was consumed by Lindbergh's Wright Whirlwind motor in the transatlantic flight. This he did in the course of his Popular Science Lecture on "Automobile and Aircraft Engines," given under the auspices of the Society of Arts on February 10, 11, and 12. Professor Taylor said that approximately thirteen tons of air were "breathed" by the engine of the *Spirit of St. Louis* between New York and Paris.

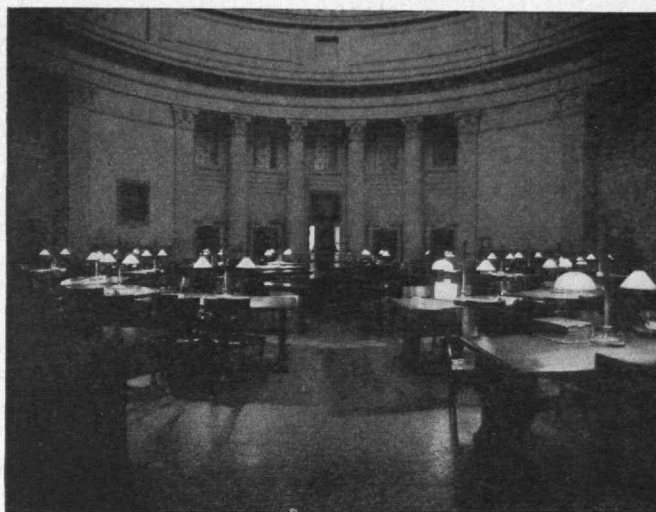
Professor Taylor was speaking of the surprising amount of air consumed by an internal combustion engine. For every gallon of fuel an engine pumps seventy-five pounds of air, an amount that would fill a room ten feet square at normal atmospheric pressure. The Wright Whirlwind engine used by Lindbergh pumped 1500 pounds of air an hour, during which period it consumed about twenty gallons of gasoline. Supercharging, one of

the most recent developments in connection with internal combustion engines, was also described. By using the supercharger it is possible to compress the thin air at high altitudes and deliver it to the engine at nearly the same pressure as the air at ground level. It has been this piece of apparatus which has made most of the recent altitude records possible. The supercharger is also responsible for the extremely high speeds attained by the modern small racing automobile, which, according to Professor Taylor, has an engine considerably smaller than that of the late-lamented Model T.

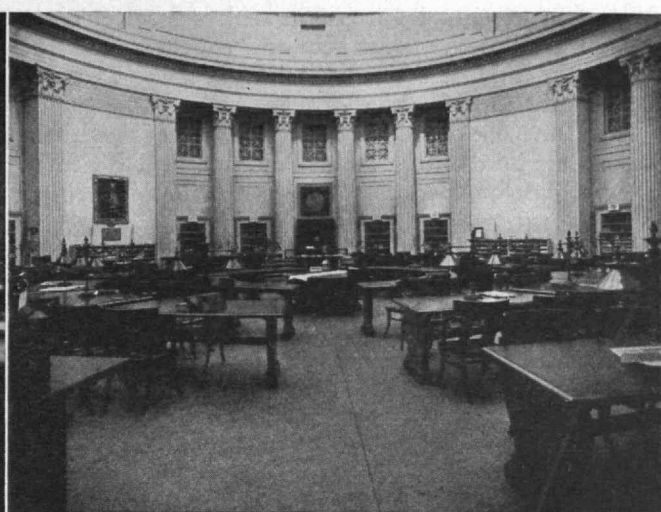
Personnel Director

ON February 1, Frank L. Locke, '86, actively assumed the duties of Personnel Director of the Division of Industrial Coöperation and Research, following the announcement of his appointment by Professor Charles L. Norton, '93, Director of the Division. The post held by Mr. Locke has to do with the placing and replacing of Institute graduates in industry, with the concomitant function of being a liason officer between Technology as a producer and industry as a user of trained men.

The new Director comes admirably equipped for such work. For a long period he was an executive of the Boston Rubber Shoe Company. Leaving this firm in 1907,



BEFORE



AFTER

Flood lights within the rotunda of the dome now provide adequate illumination for the Institute's library

he became President of the Boston Young Men's Christian Union, a position involving much work in vocational guidance and employment problems. Avocationally he has been active in many civic organizations and enterprises. During 1902-03 he was President of the Alumni Association, and a Term Member of the Corporation in 1906-10 and 1921-26. It may well be expected that under his guidance the personnel activities of the Division will undergo material expansion and increase in usefulness.

Presidents Three

THREE important professional organizations — the Society of Automotive Engineers, the American Society of Landscape Architects, and the American Society of Heating and Ventilating Engineers — picked Technology men to be their national presidents at meetings held concurrently during the last week of January. William G. Wall, '96, Arthur A. Shurtleff, '94, and Arthur C. Willard, '04, were the men chosen. Colonel Wall, a consulting engineer for the Stutz Motor Car Company, assumed the Presidency of the S. A. E. at its annual meeting in Detroit. A recognized authority in his profession, he is credited with the design and construction of the first American-made six-cylinder car, and is said to have been one of the first engineers to recognize and study the possibilities of the twelve-cylinder automobile engine.

At the annual meeting of the American Society of Landscape Architects held at Salem, Mass., Arthur A. Shurtleff, '94, of Boston, adviser to the Metropolitan Planning Commission, was elected President and Arthur R. Nichols, '02, of Minneapolis, Vice-President. For a number of years Mr. Shurtleff has acted as consultant to the City of Fall River, Mass., in connection

with its building program, and it was to him that the civic authorities immediately turned for assistance in the replanning of the burned area caused by the disastrous fire early in February. Besides Fall River, Mr. Shurtleff's long and active career has embraced town-planning work for Hartland, Vt.; Sandwich and Keene, N. H.; Newport, R. I.; and twelve Massachusetts communities. During the War he served as adviser to the United States Housing Corporation and planned the industrial villages at Bridgeport and Stamford, Conn., and Newport, R. I. Subsequently, he laid out three industrial villages in South Carolina and one for the Bemis Brothers Bag Company at Bemis, Tenn.

Professor Willard, who was made President of the A. S. H. V. E., is a practicing consulting engineer and for seven years has been head of the Department of Mechanical Engineering at the University of Illinois. Before going to Illinois in 1913, he taught mechanical engineering at George Washington University and served as a sanitary and heating engineer for the United States Quartermaster Corps in Washington. He was a consultant on ventilation problems arising in the recently opened Holland Vehicular Tunnel connecting Manhattan with New Jersey.



F. L. LOCKE, '86
*Personnel Director of the
Division of Industrial
Coöperation and Re-
search*

Officer, Medalist

SIGNAL honors have recently come to two Alumni: Pierre S. du Pont, '90, Life Member of the Corporation, was credited as an Officer of the Legion of Honor, and Myron L. Hunt, '93, received the Arthur Noble Medal, awarded each year to the one who has most notably promoted the beauty and welfare of Pasadena, Calif.

Nearly seven years ago, May 15, 1919, to be exact, the French Republic conferred the decoration of Chevalier of the Legion of Honor on Mr. duPont for his services to the

Allies. His present advance to the rank of "Officer" is in recognition "of the great help and encouragement he has shown and interest he has taken for many years before, during and after the World War."

Mr. Hunt, one of the foremost architects of the Southwest, is the third of the Noble Medalists and Dr. George Ellery Hale, '90, Honorary Director of the Mt. Wilson Observatory, was the second. Besides the Pasadena Public Library, the first of its new civic center group, for the design of which the 1927 Medal came to Mr. Hunt, he was also the architect of the Henry E. Huntington Library, the Ambassador Hotels in Los Angeles and Santa Barbara, Occidental College, the Flintridge Country Club, the Pasadena, Riverside and Upland Hospitals, and the University Club of Los Angeles.

Bragg and Brillouin

YEARLY to the Institute come notable foreign savants to exhibit their intellectual wares. January and February brought one each, men eminent in their fields. Leon Brillouin, Professor of the College de France, on January 28 and 30 delivered two papers on the "Quantum Theory," and with the opening of the second term, W. L. Bragg, Langworthy Professor of Physics at the University of Manchester, England, began a series of thirty lectures on "Crystal Physics."

Professor Bragg, born at Adelaide, South Australia, is the son of a still more notable father, Sir William Henry Bragg, Director of the Davy-Faraday Research Laboratory. Both have made brilliant contributions in the fields of x-rays and crystal structure, and, in 1915, they jointly received the Nobel Prize in Physics.

Old Probabilities vs. New

THE still, stark reaches of the scientific hinterlands are now and then cloven by the shriek of controversy. Last month listeners-in became aware of jealous antiphonies in that oracular province inhabited by the weather prophets. Those stolid, complacent gentlemen, clustered about the U. S. Weather Bureau, and snuggled in the valley of Things as They Are, have flung taunts at their more imperious brothers who have scaled Observatory Hill to commune with the sun. The former have issued a bull, stamping as heretical the long-range forecasts of the sun worshippers, while the

latter have thumbed their noses at the fundamentalists and their short-range creed. The prophets are without coöperation in their own country.

The feud waxes warm. The Bishop of the valley, C. F. Marvin, Chief of the United States Weather Bureau, has publicly attacked the long-range forecasts of H. H. Clayton, weather prophet for the Associated Industries of Massachusetts, who has the coöperation of Charles G. Abbot, '94, Secretary of the Smithsonian Institution.

Mr. Clayton, in making forecasts a week ahead based on solar radiation, claims to have been correct 244 times as against 148 forecasts made one day ahead by the Weather Bureau. The charge of incompetence and intolerance has been reciprocally delivered, and it only remains for the Claytonites armed with bolometers to lay down a barrage of sun spots against the Marvinites equipped with thermometers and cyclonic storms.

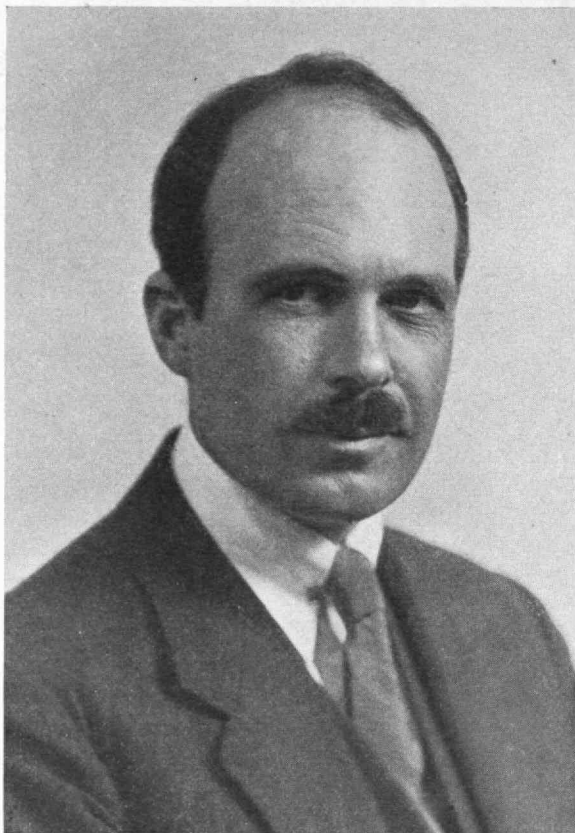
On Mt. Wilson, at Calama in Chile, and on Mt. Brukaros in Southwest Africa observers are collecting data and compiling tables in the Smithsonian Institution's effort to establish some relation between the sun and the weather. These solar observatories carefully record variation of the heat radiated by the sun. To date data over eight years have been collected. But this does not furnish a long enough historical basis for altogether trustworthy forecasts at long range.

There seems to be some connection between solar radiation, and, therefore, between weather, and the waxing and waning of sun spots. A careful study of these relations is being conducted.

Technology Etchers: Andrew H. Hepburn, '03

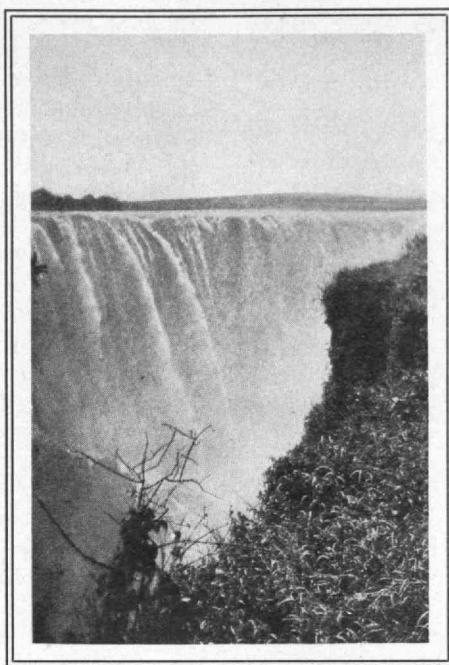
ANDREW H. HEPBURN, '03, who executed the etching of the convict ship reproduced on the cover of this issue, the fifth of The Review's series of eight, is an expatriate Pennsylvanian. He was born at Catasangua, Penna., on March 6, 1880, but following his graduation from the Institute's Department of Architecture, he has spent most of his time in New England. Since 1916 he has been a practicing architect and is now a member of the Boston firm of Perry, Shaw and Hepburn.

By way of avocation he does occasional etchings and lithographs. To date he lists some twenty plates. The one reproduced on the cover depicts the stern of an old convict ship that put into Boston in 1923.



W. L. BRAGG

Professor of Physics in the University of Manchester, England, who lectures at the Institute this term



Cheerio, Africa!

Following a Fifteen-Month Loaf in the Pacific, the Author Goes on Further Browsers, as Related in the Following Abridgement of an Illustrated Lecture Delivered Before the Faculty Club

By SETH K. HUMPHREY, '98

YOU have heard of going up like a rocket and coming down like a stick. I went to Cape Town by way of Buenos Aires on one of the most luxuriously conducted tourists' vessels that ever sailed out of New York; then, in order to get the bad taste of that out of my pocketbook, I returned on a freighter. In between was a journey of 5,200 miles through Africa's interior. Somebody has said that my trip was an old man's stunt. This almost broke my heart, — I had hoped to pass it off as a young man's folly.

If you have ever been on one of these highly-conducted tours all the way down the east coast of South America, you can realize that we were as carefully guided and tended and sheltered as a flock of boarding school girls, but I daresay we picked up less about the wicked world around us. That sort of traveling is all right for the infirm, or for the timid of both sexes, but for me it is too lazy — like drinking soup through a tube. It gets by without those intimacies of contact which give flavor to the undertaking. I arrived at Cape Town from Buenos Aires with the collection of high-priced tourists, made up mostly of fussy old gentlemen and amiable widows. I set out northward toward the Equator for Victoria Falls, the greatest waterfalls in the world, the place where practically all the tourists turn around and go back. Nobody goes beyond unless they have

business — except once in a while a man who has no business to be going beyond. There must be a few of these or articles like this would go unwritten.

Of course I didn't reach the Falls without going through the Union of South Africa and making stops at places like Kimberley, Johannesburg, Mafeking, and the grave of Cecil Rhodes at Buluwayo. But I can't describe in detail my whole trip in 2,500 words; so I draw on my seven-league boots and immediately drop in at Victoria Falls.

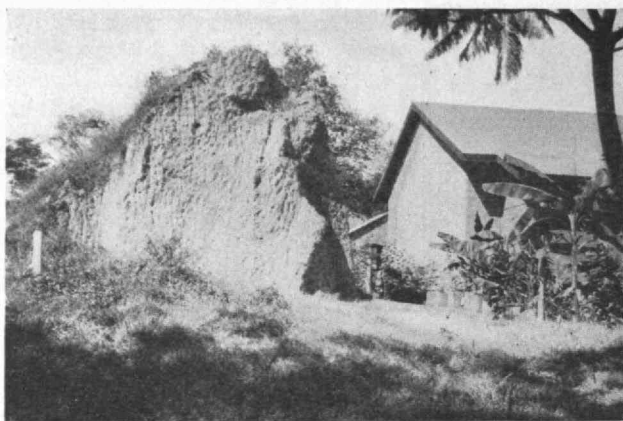
If you have ever noticed pictures of Victoria Falls, you will observe that they are taken when the water in the Zambezi is low. These falls are not like any other in the world. The Zambezi River flows a mile and a quarter wide along a perfectly level country, and suddenly drops into a crack in the earth. The crack is only about 100 yards wide, and the up-rush of water against

the opposite wall is something tremendous. I wanted a picture with the Falls at high water, a different picture from the usual ones, so I got into my B.V.D.'s, put a raincoat over my camera, and watched for an opening in the artificial downpour. Finally I got the picture above

which they tell me is one of the most unusual photographs ever taken of the Falls.

I had to wait at this place three weeks for connections up into the Belgian Congo. To pass the time I did some





ANT HILL

Modern ant architecture in Elizabethville, Belgian Congo

writing on my new book. Here, too, I began to feed on quinine, as everybody else does. The quinine habit had to be kept up for the next three months; or until I got out to the East Coast, since the whole country is simply alive with malaria. Also we had the blackwater fever with us all the way up to the Equator, together with the tsetse fly and a few other obnoxious creatures of the sort.

Finally I got started on the last thousand miles of the rail journey to the head-waters of the Congo. Two-thirds of the way up I stopped for ten days at Elizabethville, in the Belgian Congo. Above is pictured an ant hill in that city, higher than the house next to it, but luckily for the family the ants had evacuated. Elizabethville has about 2,500 white people; it is the largest white town within a traveling radius of over 1,000 miles. It owes its whole existence to the copper mines worked by the Belgians. While there I saw their prisoners chained in squads of three, so they couldn't run away. If they did gain their freedom, with nothing around this town for 1,000 miles except the bush, their capture would be impossible.

From here I took a little twice-a-week train for the head of the Congo River at Bukama. The natives all along the way are untamed Africans. But nobody pays any attention to the blacks in Africa; they are supposed to be able to look out for themselves. There are no whites in this region except for a few Belgian officials. The bridge of the railroad shown adjacently marks the head of navigation on the Congo. Here the upper Congo is known as the Lualaba. It is over 2,500 miles from this bridge to the Congo's mouth on the West Coast. An interesting trip of 400 miles down the Lualaba brought us to Kabalo, where I left the little steamer to go eastward into Tanganyika Territory and the lake region. You would not expect much from a little railroad 170 miles long in the center of Equatorial Africa, yet it sported a better train in its accommodations than the

Pullman people can possibly put on in America. I have never seen anything equal to it. It had running water in every state-room, real spring beds, and a tiled bathroom in the end of the car with a shower bath. I will admit, however, that it was the only bit of luxury which I saw in three months.

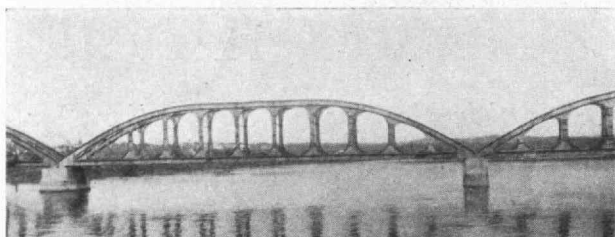
But they do go lazily here. The 170 miles took eleven hours. I then went from Albertville on the Belgian border across Lake Tanganyika, the longest fresh water lake in the world, to Kigoma, in what used to be German East Africa. This night's journey was on one of the poorest vessels I have ever experienced, and I have seen vessels where I did not know whether to go to bed with my boots on or not. We went 200 miles still farther east, and arrived in Tabora. Tabora is a town which the Germans built when they were in control. Now, the whole of Tanganyika Territory is a mandate of Great Britain under the Treaty of Versailles. It is an enormous territory, 600 miles square—in length half way from Boston to Chicago, and as far north and south as from Buffalo to Alabama. About three-quarters of it is in the grip of the tsetse fly; there is no such thing as a horse in the country, because one sting of a tsetse, which would not hurt a white man particularly, would

kill a horse every time. In this region humans have to do the carrying; everything goes in fifty-pound packages and everything goes on a black man's head.

The Germans laid out Tabora for 50,000 white people. They built the hotel half a mile from the railroad, the post-office half a mile from the bank, and none of them within half a mile of anything else. In-

stead of 50,000, Tabora has 134 white people today.

Tanganyika Territory has about 5,000,000 blacks, and after fifty years of white endeavor to settle the country there are less than 2,500 whites living there. The reason for this is that there are about seven kinds of fevers and the tsetse fly. At present three large areas of sleeping sickness are developing.



ACROSS THE CONGO

This bridge, at the head of navigation, is 2,500 miles from the mouth of the River on the West Coast



IN TABORA

The author utilized the house on the right during his stay there

It is the greatest lion country in all Africa. A few days before I arrived at Tabora, four big lions walked into town at nine o'clock in the morning, killed a black man, and injured a white man; in the battle which followed two of the lions were killed. For a number of nights afterwards a big lioness came into town hunting for her old man. That struck terror in the hearts of the natives, but it made no difference to me. I decided to give up my long evening walks on account of mosquitoes. If you don't want to have long waits for transportation, don't go to Central Africa. I had waited three weeks in Victoria Falls.

I had waited ten days in Elizabethville in a rotten hotel. Now I waited three weeks in Tabora for a motor ride 220 miles north, — waited for the road to dry up enough to be passable. I lived in the house which was under the hotel's water tank (shown on page 280) and I had quite a lot of neighbors all around me — natives in their grass huts. There is a mixture of the old Arab in a good many of the natives there, not to mention numerous other strains. For instance, my water boy. He looked like a combination of Israel, Mohammed, and plain Black. While I was waiting at Tabora I had one of the most interesting experiences of my journey, — the arrival of the Cape-to-Cairo fliers. For hundreds of miles at a stretch over the African brush it would have been sure death for them if anything had happened to their machines. If there is anything more thrilling than to have four airplanes come down on you in the center of Africa, I do not know what it is. The aviators were introduced to the Governor, who came in from the coast on a special train, and for two days the fliers owned the town. The Governor took advantage of the occasion to have a powwow with all the negro chiefs of the country. The Englishman or Belgian would not last a minute in Central Africa if he tried to collect from the black man the head tax, which everybody has to pay. They do it all

through the chiefs, and pay the chief a commission. That is the only way to control the blacks — conduct all dealings through their chiefs.

I finally started on the motor trip of 220 miles to the south shore of Victoria Nyanza, after a man coming in over the road had managed to get through in five days. He said that one night three lions came out of the bush

to look him over, but providentially concluded they did not want to eat him. In Tanganyika Territory there is about one white man to 2,000 negroes. In the region of this motor trip there are about 5,000 blacks to one white man, besides lions and hyenas.

I went on a truck, which was one of four going

only 100 miles. The road was so fearful that they would not take me any further, but I might go on by safari. This sort of a walking trip requires about thirty black "boys" to every white man. By a lucky chance at the end of the 100 miles we happened to meet a young white man who the day before had come through on a Graham truck from the south shore of Lake Victoria. He was just the man I had been looking for, without knowing it.

When I started out with him there were ahead of us about twenty-five miles of swamp; this we had to get through. We struggled all day long, and finally got stuck in the middle of the swamp. What this fellow expected of a car was something incredible. He figured that it should go through anything that a young gazelle could jump over; he jammed his gears so hard that he stripped his differential. Of course that was the finish for that

truck, — and we were seventy-five miles from the nearest garage. We sent for the chief of the nearest village. We told him we wanted twenty men to pull us out to the edge of the swamp. These he furnished, and out we came. There we made a camp by taking the tarpaulin off the load and rigging it as shown in the picture on page 282. This chief also gave us two runners to carry a message to the nearest telegraph post, which happened to be thirty-five miles away; and the telegram carried the news the other forty miles to the garage, and a truck came out the seventy-five miles for us. On a trip like this we, of course, carried our own food, blankets, and water; so we were quite comfortable during the three days of our wait for the truck. It was about 160° in the sun during the day, but we kept under the tarpaulin, and under our helmets, whenever out in the sun. If we hadn't, we would have been sun-struck. The only serious question was that of drinking water. When I mentioned this to my



PAY DAY

Reimbursing the natives who pulled the disabled truck for ten swampy miles



CONDOR

When Mr. Humphrey went hunting this is what he shot

friend, he remarked that we happened to have twenty-four dozen bottles of imported beer on the truck. The thought of that beer started us worrying about our water supply. Water became something precious, a thing to be conserved at all cost, even to the extent of depriving ourselves of water. So we relieved the tense situation by breaking into a case of beer at once.

We shot a gazelle, and had venison. The natives were harmless, but it was just as well to have a dead line and have your guns around, just for show. At night we did not want the blacks pilfering, so we told them that they must be out of range at dark, and stay there. They did. The only danger was lions. We heard hyenas by night, and where hyenas howl there are always lions. We were a little ticklish about lions, I must admit.

After three days our rescue truck arrived to tow us seventy-five miles. We still had ten miles of the worst swamp ahead of us. Usually a car can get through that swamp with about fifty men, but we, with our dead truck, had to have seventy men to pull us the ten miles. Finally we reached Mivanza, a little town on the border of Lake Victoria, where I had to wait six days for a boat to take me north to Uganda. One of the most interesting things on Lake Victoria was to see the clouds of insects come out of the water. They are insects not as large as mosquitoes. They hatch at the same time in the water and come up in a cloud several hundred feet high, like a great cloud of dust. I would like to know how many billions of them there are. If the boat runs into them they will sometimes cover the deck two or three inches thick. It is a lucky thing that they do not bother white men; if they did there wouldn't be any white people around Victoria. Lake Victoria is the source of the White Nile, and is the second largest fresh water body in the world. Then I got into Uganda, where I knocked about for a fortnight. Among other things I saw the tomb of one of the bloodiest of African chiefs. This fellow used to kill his people

for amusement, and for anybody who more than mildly displeased him he had a pool of alligators to throw them to. The movies could make good use of his story.

The rather pretentious but miserably run hotel in Kampala, Uganda's principal town; the number of white men frankly drunk in the hotel's bar; prices absurdly high, and niggers too damned sophisticated for any use — these indicated the nearness of civilization as it is on Africa's East Coast. That nearness spelled an early finish for my journey through the interior; and I, having lost eighteen pounds during the four months with never a sick day, was ready to get out.

Three days eastward across Lake Victoria brought me to Kisumu, after a day in Jinja, where the waters of the Lake spill over Ripon Falls and become the Nile. Hippos play in Lake Victoria, and black schools of fish sport in the Nile within a half-mile of each other.

In the British colony of Kenya, now — the hunting-ground made famous by Roosevelt, and made expensive by millionaires trying to do what Roosevelt did. Nairobi, at the center of the game region, offers sports more inducements for hunting with money than any other town on earth.

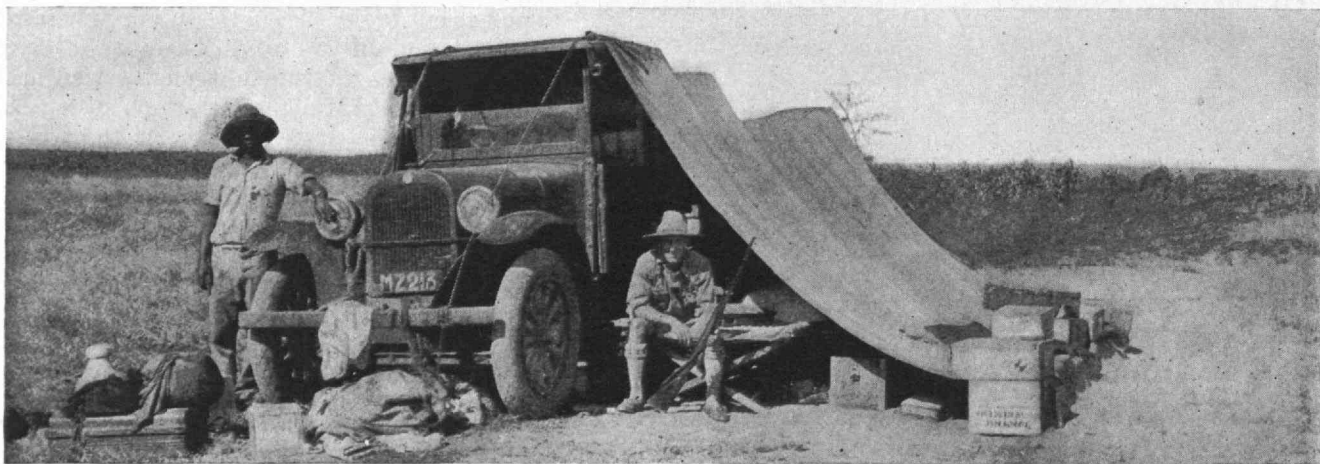
Then to Mombasa, the perennially hot terminus of the Kanya-Uganda Railway. They do not furnish bedding on the trains of this railroad because there is so much danger of infections being carried by it. Each passenger must bring his own. At this port I boarded a vessel from Bombay, for an eleven-day voyage down to Durban, South Africa's principal city on the East Coast. It is a strictly English colonial town, a beautiful seaside resort. I saw there dead man's tree upon which the city undertakers post notices of their funerals for some unknown reason. Here ends the fifty-two hundred mile trip through Africa.

If you think you must take it, get fat first. Then feed on quinine, travel with a mosquito net, and look out for tsetse flies.



CAPE TO CAIRO FLYERS

The author witnessed the arrival of these English planes in Tabora



STALLED

Pulled out of the swamp, the travelers waited for relief. It was here that they denied themselves drinking water

Scientific Education

Do We Know What We Want and Can We Get It?

By FRANK B. JEWETT, '03

President, Bell Telephone Laboratories, Inc.

FOR the better part of twenty-five years, we in the United States have seen a rising tide of question, inquiry and study directed toward the mechanism of engineering education. Papers have been written and presented on the subject, discussions have been held and extensive studies like those of the Society for the Promotion of Engineering Education, now under way, have been made and reported upon. The whole subject of scientific education, and particularly of engineering education, has in these recent years been under the white light of intense scrutiny. It has been viewed from every conceivable angle and been approached from every possible point from which men could make a departure from the shores of their own personal training and experience.

While the zest for inquiry has been particularly marked in the United States, something similar has been going on in all the other so-called industrial nations. As a result of this world-wide interest, and as part of the machinery we have employed in our quest, innumerable individuals and commissions have visited and studied in foreign countries. Untold numbers of experiments have been tried on our engineering educational machine, and curricula have been revamped times without number. But still the quest goes on with unabated zeal. At first sight it would appear that we are still almost as far from a satisfactory answer as when we opened Pandora's box. Is it possible that there are no answers to the questions we have raised, or are we in fact pursuing a wrong course?

Part of our interest is obviously collateral with the interest in education generally which has become so widespread and characteristic of modern civilization. This alone is not sufficient, however, to explain the phenomenon as it appears in the realm of science and engineering. Why are we engineers so much concerned about our engineering schools and the methods they employ? Why are we so anxious, as the records appear to show, to bring about a drastic revolution in the methods which have sufficed until now and which viewed en masse have been productive of such obviously great results?

Individually our feelings almost invariably arise out of a common experience — dissatisfaction with the finish of the mill run of human material which comes to us. Few of us think for a moment that the material itself as delivered to the educational factories is essentially less satisfactory than in times past, but we are frankly not wholly satisfied with their finished product — our raw material. Possibly this statement should be modified slightly. It is true that a good many of us have wondered at times whether the engineering schools were in fact receiving their full quota of sound young timber. In absolute measure we see no diminution in the amount but we may well question whether the structure of

modern social life may not require a reapportionment of the supply to its different educational factories.

Being dissatisfied with the material that is coming to us, we, who have become well seasoned (or well checked) by our years of experience, are prone to assume that there may be something radically wrong either in the personnel or methods of our engineering schools, or in the basic philosophy which underlies their work.

Realizing that past experience, which is history, is usually a mine of information which human beings have found valuable as a guide to future conduct, our normal reaction is to study the past in its relation to our present situation and from this study to map out our course for the future. While I have no quarrel with this general method, properly applied, it seems to me, as I look about at the results of our work, that in our zeal to be helpful we have in many instances pretty much befuddled the question.

Few there are among engineers who have not at some time or other become doctors of engineering education and taken a whack at our supposedly sick patient. Some of us who are experienced as surgeons are convinced that the cure lies only in better tools for bigger and better operations on arms, appendix or solar plexus; some are sure that the cure is to be found only in internal medicine administered with an allopathic ritual; some believe with an unshaken belief in the efficacy of anti-toxins or serums judiciously injected with a large hypodermic needle, while others of us feel certain that the patient is a clearly established psychopathic case. With all of us insisting on our doctrine being followed, the path of the patient to health, vigor and a better manhood is indeed a rocky road to Dublin.

The engineering student must be given more humanities; he must be taught fundamentals; he must be imbued with an appreciation of research and the power of the research method; he must be trained for leadership and for engineering management (whatever that may mean). Finally, when he emerges from the molding process he must be fitted to take his place as a leader in public life, because, say some of our doctors, a large part of society's ills are attributable to the absence of engineers from the high commanding positions. Society must sooner or later (sooner if it knows what is good for it) throw out its incompetent leaders and replace them with infallible engineers. Are we not living more and more in a complex scientific world, say these well-wishers of society, and who better than an engineer is there to be our leader and to arrange the buttons we are to press?

Personally I am one of those who believe that society could profit from a more intelligent and greater employment of its scientific and technical men in connection with the formulation and administration of the laws which it enacts to govern its day by day conduct. We have too many examples of our failure to inquire of

Dame Nature before passing legislative enactments, to make it unlikely that we could do a better job if we had the knowledge, desire and will to use all of the tools in the field of engineering and science which technical education has afforded. Probably, however, we are making haste as fast as is good for us. I see no overwhelming evidence that the world has become suddenly engineering-minded, or that it desires to be governed by its intellect rather than by its emotions. So long as society is composed, as at present, of a multitude of human animals actuated largely by the changing impulses of the heart of Babbitt rather than the coldly calculated decisions of the brain, I for one would dislike to live on the regimen likely to be produced by a too rapid elevation of engineers into positions of great and dominant authority in the political machine. Dealing as they do with matters for which the test of success or failure is something concerned with absolute truth, engineers have in large measure a lack of appreciation of certain human reactions. This lack, which for want of a better term we might designate as political ineptitude, would result, I fear, in some pretty unpalatable rules and regulations.

I do not wish at all to be understood as thinking that all engineers are lacking in the qualities which would make them most admirable as legislators or political executives. Quite the contrary. But I do take exception to the idea that a wholesale employment of engineers as a substitute for lawyers and others as legislators and political executives would radically improve our situation.

The bent of mind which in the past, and so far as I know in the present also, has impelled young men to seek a training in science and engineering, and the inherent impelling interest in the problem of dealing with things rather than human beings, tends to leave engineers deficient in and frequently somewhat scornful of many factors in human relationships which are as important, or more important, to wise law-giving than is a knowledge of the laws of nature. Possibly when the world has lived longer in what we are prone to call the "age of science," we will have a better adjusted flow of men through our institutions of science and engineering, a better training and organization of their life work, and a better scheme for finding and utilizing the services of those who show political aptitude.

Having railed somewhat (good-naturedly I hope) about our solicitude for, and rampant inquiry into, the realm of what is the matter with engineering education, I propose to indulge in what many may think is the sin of adding to the bonfire.

Just why have we been so solicitous about our mechanism for scientific and engineering education and so anxious to do something greatly to improve its functioning?

As I see it, our anxiety and solicitude arise from a very conscious appreciation of the fact that the enormous strides of pure and applied science in the past half century are rapidly transforming the world into a very complex and intricate organism in which the lives of men and women are each day becoming more and more enmeshed with machinery of one sort or another. Having this picture clearly in mind and wishing to insure that

the results for our children and grandchildren will be good rather than evil, we have come to appreciate acutely that the type of education which once sufficed to produce the creator of discrete physical things is no longer adequate. To train our successors, who will be called upon to operate these things not in isolation but as part of a great interconnected whole, we need something different. Further, we have come to appreciate that the physical things to be produced in the future require, both in their production and their utilization, an understanding of science far deeper than that which was given to us.

Finally, we have a fear that science and engineering are failing in some way to make that appeal which will attract to our technical schools in sufficient quantities the type of men whom we see to be required in the future if society is to partake in full measure of what Nature has to offer.

Have we gone about our quest for the solution of our difficulty in the best possible way? I hardly think we have. We have done an enormous amount of investigation of things past and present, have made undoubted great improvements in details, and have mapped out some things for the future which are unquestionably of merit. To the extent, however, that we have failed to take the long look ahead and see where pure science is leading applied science and technology, we have fallen short in setting forth the fundamental requirements on which the philosophy of our educational institutions of the future must be based. To the extent also that we have depended on the average of conclusions of essentially untrained observers and have attempted to enforce these conclusions in terms of engineering education standardization, we have done our cause and our successors a distinct disservice.

In educational methods, as in every other phase of human activity, epoch-making advances are rarely, if ever, the result of the town meeting type of consideration. They are almost, if not always, the result of individual genius, backed if it is true, by man's faith in the possessor of that genius—a faith great enough to grubstake him in his explorations and developments. When we think of notable progress in education in this country we never think in terms of committees or commissions or group action. We always think of individuals, of the Eliots and Gilmans, the Harpers, Rogers and Walkers.

Have we such men available? I do not know for a certainty, but I strongly surmise that we have. Perchance we have them already among the presidents of our great technical and scientific schools. If we have, there is more than a fair chance that we have hamstrung them with a load of tradition, a burden of administrative detail, the task of raising funds to do a little better the job now under way, or we may have denied them our faith to back that vision of a bigger and better future for technical education which they may possess.

Perhaps they are among the eminent in the field of pure science, who while seeing far results of men's conquest of the secrets of Nature, have never given thought to the problem of educating men to avail themselves of discoveries yet unmade. If our man is there, let us take him up on a high mountain and show him the prospect

of a man's work in the world as great or greater than anything which his pure science dreams may have presented to him.

Or, and here because of its size is a very likely field, our man may be in the ranks of great engineers. He may be successful as the world measures success and he may have dreamed, as I know many who have, of a chance to spread his wings in the realm of education. If he is the right man and if he has failed to try out the substance of his dream for lack of opportunity or because of the hostages to fortune which his material success may have caused him to give, or if he shrinks from the prospect of a killing mass of administrative detail of which he is fearful but ignorant, let us remove the hurdles from his path. Let us take him likewise, to the top of our mountain and show him not only the vista but the path to the land of his dreams.

In a word, let us search for a *man*, and wherever we find him, let us dragoon him into our service and during the process of dragooning let us extend to him in full measure the assurance of our support.

We are not searching for an army of men, nor even for a regiment, a company or a platoon. We are searching for a man, or at most, a very few men. We do not require many, for we have it on good authority that a little leaven leaveneth the whole. Just as Eliot and Gilman, Harper, Rogers and Walker in their several times and fields gave impetus to radical changes in educational concepts which have now become nationwide standards, so our man of the future, if we can find him, will be insured a following great enough to supply the needs of the nation.

Finally, what about an adequate supply of the proper youthful timber for this new engineering school of ours? Will the right kind of boys in sufficient numbers seek admittance? I think they will, although society as a whole and the units of society which we call "industry," in detail, are still far from having completed the job that is theirs to do.

What is it that in every age and in every part of the world has served to direct youthful minds in some particular direction toward a career? Why has the world had its ages of oratory and architecture in Greece, its age of art, its age of literature, and in our time its age of industry? Was it because at these several periods men

were intellectually different from what they were before or have been since? I think not, for I believe that were the conditions right we could resurrect and outdo at the present time the performance of any of these great eras.

The reason why different ages have come to be recognized as preëminent in some one or other of man's accomplishments, is because great numbers of the ablest of the youthful citizenry sought to embark in a particular field and strove to become preëminent in that field. What has come down to us out of these eras of the past? It is the lasting product of a relatively few men backed by a vast product only less worthy than the work of the leaders. But why did young men turn their eyes and thoughts in the particular direction at the particular time? They did it because their world esteemed success in that direction as the greatest thing that the world had to offer. It meant fortune and was therefore attractive in so far as fortune is ever an impelling motive. Beyond and greater than that, however, is meant the acclaim of one's fellows and the satisfaction which such acclaim affords. With it all, in each era which we now recognize as outstanding for some activity, there was provided in one way or another adequate means for education in the chosen field.

If our dreams for engineering or technical education are to come true, we must not only provide adequately for the training of those who elect to devote their lives to applied science and to seek eminence in it, but we must in addition see to it that the prizes for success are sufficient and not inferior to the other prizes which the world has to offer. Material prosperity along the course, of a certainty. Our youthful prospect will not be attracted and will turn elsewhere if he feels sure that his material rewards are likely to be such as will prevent him from leading a normal existence in the society of his friends and intellectual equals. Monetary reward is, however, relatively of minor importance as compared with opportunity to grow and expand, and above all, to bask in the esteem of his fellow men as one who has succeeded in a field of activity which the world esteems worthy.

So, answering the question I set myself, "Do we know what we want in scientific education and can we get it?", I think we can say with all certainty that we do know what we want and we can get it, if we continue our quest wholeheartedly and with an eye single to the real goal.



Books

Graphic Arts · · Lt. Doolittle on Flat Spins · · Horton on Hydraulics

Of the Making of Books

THE GOLDEN BOOK, *The Story of Fine Books and Bookmaking, Past and Present*, by Douglas C. McMurtrie, '10. \$6.00. 406 pages. Chicago: *Pascal Covici*.

TECHNOLOGY, even without having organized a proposed course in the Graphic Arts, may feel some special gratification in the very honorable place America holds today in the development of fine printing and type design, since one of the younger men carrying on the distinguished record of Mr. Bruce Rogers, Mr. Goudy, and others who have made our country a leader in fine book production, was eighteen years ago a Technology student and Editor-in-Chief of *Technique*. Mr. McMurtrie has enlarged his service to the printing art by publishing a volume that puts into compact form material hitherto to be gathered from many and expensive books. To acquaint one's self with all the arts of the book has heretofore meant study of Mr. Updike's "Printing Types," Mr. Pollard's "Fine Books," Walter Crane's "Decorative Illustration of Books," and yet several other books, all too full or technical for the beginner.

The general reader may now in this single volume obtain an excellent introduction to the subject, simple, direct, in brief chapters, adequately illustrated. The account is readably given, and, so far as this reviewer has noted, accurately, save for dating the Puritan landing at Plymouth 1619. (The "design in the nature of a canopy with tassels hanging at the sides" which puzzles the author, on page 232, is the cardinal's red hat, constantly used heraldically, here presumably because the book's patron was Cardinal-Archbishop of Mexico.) The probable interest of American readers has given somewhat excessive space to local topics of small import in the whole story of book design, such as the early Massachusetts presses and Franklin; Mr. McMurtrie's special knowledge of certain early binders and of the first fruits of the Mexican press occasions perhaps some disproportion. But there is welcome emphasis on the modern achievement stimulated by the work of William Morris, whose productions are very justly appraised. The reader only wishes that the author had given more of his comment, as an expert in typography, upon the beautiful English private presses.

The volume is sumptuous in appearance, with specially watermarked laid paper, a cover tooled in gold from a magnificent Maioli design, even with doublure tooling inside the covers. Such almost ostentatious elegance challenges a searching examination of every aspect of the printing. Dull coated paper has permitted the use of many half-tone plates not glossily at variance with the text pages; and the plates are all well produced and abundant — freshly selected, also, without repeating many already known to readers from the Studio

volume on the Art of the Book. It is surely to be regretted that, although some illustrated pages were reduced in size to conform to the type page, some are reproduced so large that they lap, in a very ugly fashion, over most of the top and bottom margins.

The varying design in chapter headings and initials is perhaps justified by the indicated desire to illustrate many styles; but these should have been listed, with the plates, in a table of illustrations, indicating designers and dates. Since the bibliographical references are tucked into an appendix where they may not molest any unwilling reader, they might have been complete; for, the book, though popular in presentation, clearly aims to inspire a studious interest. The most serious defect (for only an incurable pedagogue will expect a writer with a Scotch name to be sound on "shall" and "will") is the frequency of misprints. The Spanish names are capriciously accented. The index items are wildly unalphabetical in sequence. The present reviewer noted twenty-one, some gross, misprints in the main text. All these matters do not appreciably reduce the usefulness of the volume, but they are notable in a discussion of the "Golden Book": for "if gold ruste, what shal iren do?"

The price is commendably moderate for a book so solid, so well illustrated, and so handsomely produced.

HENRY L. SEAVER

The Art of Flying

AIRPLANE DESIGN, by Edward P. Warner, '17. \$7.50. xi+598 pages. New York: *McGraw-Hill Book Company*.

FOR a long time there has been a crying need for a "Handbook for Airplane Designers." The advance of aeronautical science has been so rapid that to date no completely satisfactory treatise has been written. In the past a book on airplane design became obsolete almost before it was off the press, but Professor Warner in his present volume has treated his subject in such a general fashion and made his statements in such a broad way that this very excellent book should be a standard for some time. It begins to fill a long-felt want, but it is only the first step toward a truly scientific and authentic handbook or set of reference books for the airplane designer.

This volume does not deal directly with Airplane Design nor does it treat of Theoretical Aërodynamics. It exemplifies the practical aspect of aërodynamics, and I believe a more appropriate title would be "Practical Aërodynamics." By far the best previous attempt at a book of this kind, although far inferior in scope, was written by Lt. C. H. Monteith, an officer in the Army Air Corps, for the use of the West Point Cadets in their study of aëronautics. He very modestly entitled it "Simple Aërodynamics and the Airplane."

(Continued on page 318)

News from the Classes

The Secretary of 1902

(A portion of the remarks of the Presiding Officer at the 300th Meeting* of the Alumni Council held January 27, 1952, in Tyler Hall of the recently dedicated "House of the Faculty Club of M. I. T.")

IT is indeed a privilege to address you on this historic occasion. I shall endeavor to be brief for the hour is growing late. [Applause.]

"I see gathered before me in this masterpiece of architectural splendor and good taste a dignified audience composed of those who will carry on the work of this Council in the years to come. I also see some — alas too few — of those who raised the torch after the Merger Fight a half century ago and, at great personal sacrifices, carried it through the first hundred meetings, the second hundred meetings and the third hundred meetings.

"Of these latter there is one man at my right whose memories of this Council transcend those of any other living person. Many here tonight remember the 200th Meeting in November, 1937, in the scarcely-completed auditorium of the architectural building which so fittingly bears the name of William Barton Rogers. We older generations of Alumni particularly venerate that noble structure whose façade gives upon the placid Charles even as our elders venerated that original Rogers Building which stood on the busy thoroughfare of Boylston Street. And there are a few of us who recall the 100th Meeting in the dimly lit North Hall of old Walker Memorial on October 29, 1923, when Walter Humphreys, '97, was presented with a watch and the rest of the Council got indigestion.

"But of the few remaining survivors of the early dozen meetings of the Council in 1909 and 1910 only one is able to be with us this evening.

* The Tercentenary Meeting was scheduled for the last Monday of February, 1952, but during 1948-49 the Council broke precedent and held a December meeting to celebrate the Golden Anniversary of The Review at which time that magazine became a daily paper.

I refer, of course, to that staunch alumnus with all feet on the ground who has attended more Council meetings than anyone else; he who, as its Secretary, celebrates the Fiftieth Reunion of his Class next June, Frederick H. Hunter, '02. [Applause and prolonged cheers for Mr. Hunter.]

"All of us know him and all of us respect him. His professional renown as a Quantity Surveyor is nation-wide. It is reputed that,



ALL FEET ON THE GROUND
*Frederick H. Hunter, Secretary of 1902,
who adjourns the 300th Meeting of the Alumni Council in the adjacent columns*

given the approximate date of a structure's erection and its cubical content, he can, on a specially constructed slide-rule of his own invention, evolve with less than three per cent error the amount of material used in its construction. This method, now commonly referred to as the Hunter System, is said to have had its genesis in the mysteries of a student society of architects known as the Doric Order where Mr. Hunter first sought fame as a poet. Mr. Hunter's modesty precludes any recital by me of the far-reaching effects of the Hunter System upon modern American building construction and I refer you to the four-volume treatise on the subject he published last year, one volume of which contained unexpurgated ex-

amples of his limpid hexameters.

"His administration of the Presidency of the Alumni Association less than a decade ago is fresh in our memory. The thorough-going manner in which he conducted the affairs of state and induced the Association of Class Secretaries to turn over its modest funds to the treasury of the Alumni Association for safekeeping will never be forgotten. To be sure, Mr. Hunter was then — as he is still — presiding officer of the Class Secretaries organization, which then — as now — had nothing whatever to do but to meet periodically and did. Nevertheless the effect of the surrender of its funds under the terms of the 'agreement' dated November 11, 1942, cannot be over-estimated and the measure was one Mr. Hunter had begun to advocate as long ago as the 92d Council meeting on November 27, 1922. It was particularly appropriate that the 'agreement' should have been accomplished the same week during which the settlement of the French World War debt was concluded by the Madrid Conference.

"However, full though the record be of his accomplishments during later years, posterity will remember him chiefly as the author of the Hunter Report. The exact nature of that document — for my friends there actually was such a document — was suppressed along with many other things in the confusion of the Great War and was not revived until two years ago in connection with another agitation for the establishment of a varsity football team.

"Today the Report is perhaps more fully appreciated than at any time since it was written forty-odd years ago. Then its far-reaching consequences were scarcely appreciated although it was felt by some to constitute a Magna Charta for the undergraduate activities.

"In connection with my remaining remarks on the Hunter Report I wish to acknowledge my indebtedness to the Collected Papers of the late Secretary of the Advisory Coun-

cil on Athletics which I have been privileged to edit for posthumous publication* by the American Olympic Committee in conjunction with the games of the XVth Olympiad to be held on Boston Common next summer. I have drawn freely upon this source of material.

"It was in 1909 that the Alumni Council constituted a committee to investigate the Advisory Councils of the various undergraduate activities with the idea of destroying the conditions of static perpetuity under which they labored. The proposition implied the resurrection of these bodies and, if this were impossible, their gradual elimination, or at least so rigid a circumscription of their activity as to render them posts of empty honor.

"Naturally the feeble and uncertain footsteps of the guileless undergraduates required wise, kindly and mature guidance, and Mr. Hunter was therefore the logical choice to head the committee which was to draft the plan to fulfill their needs. He assumed his duties with that absorbed seriousness which has endeared him to his associates and must from time to time have produced considerable domestic tension; he took his job at face value and probed.

"In a relentless pursuit of data he conferred seriatim with all Council members and even took a greater part of the student body into his confidence. From this latter he obtained much priceless information and slowly there was evolved in his mind a suspicion at first remote and nebulous, which as the days grew into weeks took form. Ultimately it was borne in upon the committee — which means Mr. Hunter, for he did all the work — that the real goal of the labor was to create a benevolent autocracy by painless methods which would not be patent to the beneficiaries until it became an accomplished fact.

"So he took counsel with himself — he had to, for the rest of the committee sat in awe of him — and produced that instrument, the fame of which will go echoing through the halls of time with the Fourteen

Points and the Eighteenth Amendment, that instrument simply, eloquently, and pithily named the Hunter Report. In this document so cunningly had he wrought, so wisely had he balanced, so judiciously had he framed, so skillfully had he anticipated, that the thesis laid down with one stroke of the pen — for his signature possesses that degree of illegibility — laid the foundations for the present admirable system of Advisory Councils that are truly advisory and banished forever the hovering spectre of any unbenevolent autocracy.

"It is not true that subsequently the wheels always revolved with frictionless suavity but Mr. Hunter was always girded for the fray, prepared to expound, extoll, elucidate, and defend this product of his brain. He builded better than he knew. It was not prescience, it was plain, uncompromising honesty of purpose which guided his hand, and from the fruits of his endeavor we may well cull him a garland — not alas of vine leaves as he eschews the fragrant grape but of that more enduring blossom, the sweet simple odorless. . . ."

At this point, Mr. Hunter, who had for the past quarter-hour been struggling to get on his feet, interrupted, "There's just one or two things I should like to say and. . . ."

This the Council took as the customary signal for adjournment and the meeting forthwith broke up.

The Grab Bag

Psychotherapeutic treatment is administered this time to the 1896 Class Notes by their ingenious and prolific compiler. "Fancy light from fancy caught!" Fox farming in one lesson takes up the first part of W. M. Corse's 1899 Notes. This is followed by a discourse on What's Wrong with Gold Mining written by Arthur B. Foote of that Class. Here is a secretarial organization that is hitting it up.

The literary influence of the 1901 Secretary may be detected in the smartly composed sonatas of the Class of 1900, while the professional influence of the 1900 Secretary shows in the dissertation on the hydraulics of squash in the 1901 Notes. Ros Davis presents a letter from Bob

Adams, giving the pronunciation of Yreka, Siskiyou County, Calif. Shepard, McGrath, and Company of 1912 are running at top efficiency, and 1913 has responded to resuscitation.

Vengeance is mine, saith the well-advertised Secretary of 1914. The Class of 1918 has its Lady Astor. Read her remarks on stag reunions. Little fairies and elves are the prevailing eugenic fashion in that Class.

To the theory that Class Notes contribute to the enrichment of the language we have long held. The latest addition is *Asec*, coined by the gentlemen of 1921. These enterprising Secretaries present some interesting statistics. They allege that 30.8 per cent of the sons and daughters of Course VI-A are twins. Parenthetically 1921 has broken off diplomatic relations with 1922. War is imminent.

It is to be hoped that no one misses the story of the Marriage of Marion in the Course IV, 1922, essay. All Class News is divided into three parts, says Holderness, — marriage, fatherhood, and change in position. Good notes, these. Course I, 1925, has a letter from Casey Reynolds, holder of the 1927-28 John R. Freeman Traveling Scholarship, that is worth perusing for its news of Germany. Shepard Vogelgesang of that Class reveals himself as a rising pianist, a student of Josef Hofmann in Vienna. Harry Jenkins, '26, reveals himself as an organist.

Fifteen births, no less, are reported in this issue: three in 1922; two in 1921, 1923, and 1924; and one in 1908, 1909, 1913, 1917, 1919, and 1926. Eight of these were boys, six girls, and the sex of the remaining one was not reported.

Deaths

In the notes from their respective classes this month will be found additional mention of the following Technology men, recently deceased:

JOSHUA B. F. BREED, I, '76. Died January 12, 1928. Chief engineer for the Sewerage Commission of Louisville, Ky.

WILLIAM DU PONT, '76. Died January 20, 1928. ". . . the first of this famous family of Wilmington to enter Technology."

CHARLES L. FOX, '76. Died in

* Uniform in style and binding with "Certain Reflections on a Mis-spent Youth" by Allan W. Rowe, '01, published in 1950 by the Royal Society for Metaphysical Research.

April, 1927. A painter "who used his artistic gifts as a means of self-expression rather than as a means of livelihood."

GEORGE H. HEWITT, III, '77. Died April 11, 1926. "He invented the first steam automobile."

CHARLES B. WHELOCK, '77. Died October 21, 1927. He was long associated with the insurance underwriting business in Boston.

JOHN P. WOOD, II, '82. Died June 24, 1927. He served as President of the National Association of Woolen Manufacturers for several years.

GEORGE C. DEMPSEY, V, '88. Died December 9, 1927. He was connected with the firm of P. Dempsey and Company, Lowell.

HARRY E. HAYES, VI, '90. Died December 29, 1927. He was an engineer with the Charles H. Tenney Company.

GEORGE R. BEARDSSELL, IX, '94. Died January 20, 1928. He was a member of several leather firms, and a director in many Lynn civic organizations.

HENRY W. ROWE, IV, '04. Died December 23, 1927. An architect of New York City.

LESLIE T. VINAL, V, '06. Died in the fall of 1927. A holder of a doctor's degree in medicine, she was associated with the Massachusetts State Board of Charity.

ARCHIBALD B. PURDON, II, '09. Died in July of 1927.

EDWARD D. LUCY, XV, '25. Died September 12, 1926.

JOHN W. GUNDLING, XV, '25. Died November 20, 1927.

LEWIS MAJOR SANFORD, II, '26. Died in December, 1927. He held the Institute record in the pole vault, and in 1925 took second place in the I. C. A. A. A. Meet.

'75 For six years after graduation the Class had no get-together. On Thursday, January 12, 1928, at the Engineers Club, Boston, was held our forty-sixth annual dinner-meeting. Those present were Atkinson, Bowers, Dorr, Eddy, Goodale, Hibbard, Homer, G. Wilton Lewis, Wilfred Lewis, and Warren. Lincoln had planned to attend, but thought it was to be on Friday, the thirteenth, and so missed the good time. Greetings and regrets came from Abbot, Lyman, Richardson, Robert B. Smith, and Webster. President Hibbard presided. As the Class owns dividend-paying securities ample for current expenses, annual dues were voted suspended.

The report on the dormitory fund showed \$2,520 paid and \$50.00 pledged, unpaid, by eight men. Excepting the Class of 1871, which is credited with \$10,000, none of the first twenty classes records a larger donation than 1875. As President Stratton remarked at the Alumni Dinner the week before, had all the classes done as well as the classes prior to 1879, in proportion to their enrollment and means, the desired million dollars would have been over-subscribed.

Bowers and Dorr gave a copy of their memoir on Hammatt, prepared by them for the American Society of Civil Engineers, to each man present, and it was ordered enrolled on the class records. G. Wilton Lewis, author of "The Tabernacle of the Testimony" and "The House which King Solomon Built," told of the favorable reception accorded these books. Outstanding students agree that he has followed accurately the Biblical account to the smallest detail, and the fine drawings are a convincing help.

Wilfred Lewis moved that the present officers continue to serve indefinitely until occasion requires the election of their successors and that the Secretary cast the vote of the Class. Seconded, carried and so ordered. A unanimous appreciation was expressed for Goodale's arranging for the hospitality of the Engineers Club, and the desire voiced that our future annual reunions be held there.

Since our prior annual meeting, word has come of the death of Follansbee, Hammatt, King, Paine, Slade, Staniford, Stanwood,

Temple, and Wilson. Of the 193 who were associated with the Class the record shows that sixty-four are living, but only twenty-nine have responded to the appeals.

On the following Saturday morning, Hibbard took Goodale and the undersigned to inspect the plant of George Lawley and Son, builders of yachts and motor boats, at Neponset. An enjoyable experience; an eye-opening glimpse of modern luxury afloat. The signs are that the company is on the top wave of prosperity, which is primarily due to President Hibbard. — HENRY L. J. WARREN, *Secretary*, Greenfield Club, Greenfield, Mass.

'76 Another member of '76 has gone on to his reward for a life well spent in the service of the community in which he lived. Joshua B. F. Breed, for many years chief engineer of the Sewerage Commission of Louisville, Ky., died on Thursday afternoon, January 12, at his home at 1432 St. James Court, of pneumonia developed after he became ill on Saturday. Mr. Breed found his life work almost wholly in his native city, contributing to the betterment of conditions in its public works. He will be remembered by all the members of '76 as overflowing with vitality and the optimism of youth. He was familiarly known among his fellows as "Old Kaintuck," or "Ku Klux," and beloved by all. In the early nineties he became assistant chief engineer, and later served three terms as city engineer of Louisville. He was a member of the First Unitarian Church, Engineers' and Architects' Club, and a leader in public affairs. He was the last survivor of a family of six children. His wife died five years ago. He is survived by a daughter, Miss Grace Breed; and two sons, Winthrop N. Breed of Louisville, and Francis S. Breed of Lynn, Mass. Although born in Louisville, Mr. Breed was of old New England stock, as also was his wife, ancestors on both sides having been among the early settlers of Lynn.

Charles L. Fox, a member of '76 during his freshman year, died in April of last year. An account of his life was circulated among the surviving members of his Class. An exhibition of selections of fifty or more of his paintings was given later in New York. The rare quality of many of these received extended notice in

the Portland papers and in art journals. Some of them had never before been exhibited in public, for Charles was an odd genius who used his artistic gifts as a means of self-expression rather than as a means of livelihood or for attracting public notice. Some of the most painstaking of these paintings related to the remnants of Indian tribes still living in the State of Maine, with whom Charles came to be on terms of great friendliness. The writer visited the exhibition in New York, and like many others was impressed with the great originality of treatment in many of these works. Perhaps the most striking of all was a painting entitled, "Forever Indian." He also left a large collection of beautiful paintings in oil of mushrooms native to Maine which has been purchased by the Department of Botany of Columbia University.

As the years roll around — it is now nearing fifty-five years since we became classmates — it is but natural that the ranks be thinned, but the loss always comes first with a shock, and then arouses happy memories of the days together and of the years between, which, after all, have passed so quickly. Your Secretary had but just written of the loss of Breed when the daily paper brought word of another, William du Pont, the first of this famous family of Wilmington to enter Technology. He did not remain with us for more than the first year. He chose studies apart from "Civils and Mechanicals," and thus I did not come to know him intimately, but remember him chiefly as he answered the roll-call of those early days. Quiet and unassuming, we did not then picture him as the banker and captain of industry into which he developed in later years.

He died on January 20, at his winter home, "Hopeton," a spacious beautiful estate on the Altamaha River near Brunswick, Ga., where he had spent his winters during the past fifteen years. This had been transformed in part from an old plantation into a game preserve. Here he found much pleasure in the entertainment of his friends. Like most of us at this time, he was about seventy-three years old. Death came suddenly from heart disease. Two children survive — Mrs. Somerville and William du Pont, Jr., of Wilmington, Del. — JOHN R. FREEMAN, *Secretary*, 815 Grosvenor Building, Providence, R. I.

'77 The Secretary has been informed of the death of G. H. Hewitt, age seventy-two, who died at Springfield, April 11, 1926. He was a mining engineer by profession and had spent many years in the West. He had been in poor health recently, and resided in Springfield, which had been his early home. He invented the first steam automobile — an ordinary buggy with an engine attached which he drove about the streets of Springfield. He seldom attended a class reunion.

Charles B. Wheelock died October 21, 1927, after a brief illness. He was connected with the Class of '77 a short time in laboratory work at the Institute. He did not attend the reunions of the Class but was much interested in yachting. He was active and very prominent in insurance matters, having served as President of the Boston Board of Fire Underwriters. The following is taken from the *Boston Evening Transcript*:

"Charles Brackett Wheelock, long associated with the underwriting business of Boston, and whose home was at 209 Babcock Street, Brookline, died this morning at a Boston hospital where he had gone several days ago for an operation. Mr. Wheelock was born in Bedford, July 8, 1856, and his parents were Edwin M. Wheelock and Ellen (Brackett) Wheelock. He entered Cornell with the Class of '76, and following his graduation he entered the Massachusetts Institute of Technology where he studied civil engineering, and later took a course at Harvard where he specialized in Greek mythology. Having finished his collegiate work, Mr. Wheelock went into the insurance business and for some time his concern, known as the Charles B. Wheelock Insurance Agency, Inc., has been located at 40 Broad Street.

"He was a member of the University and Exchange Clubs, and at one time was Commodore of the Corinthian Yacht Club at Marblehead. He also had been President of the Boston Board of Fire Underwriters. He is survived by one son, Harold S. Wheelock, who lived at his father's home. Mrs. Wheelock, who was Ella Stetson of Brookline, died eleven years ago. There is a surviving sister, Mrs. John D. Howson of Austin, Texas. Mr. Wheelock had resided in Brookline for twenty years."

The Class of '77 has raised the sum of \$2,700 towards one room in the dormitory building and has forwarded a check to the Bursar. There were thirty-four who gave, out of a total of fifty-eight on the mailing list. It was a source of regret to the Secretary that a large number who were fully able to contribute did not respond to the appeal and gave no reason for not answering it. — RICHARD A. HALE, *Secretary*, Essex Company, Lawrence, Mass.

'82 The Secretary has but recently learned that on June 24, 1927, John P. Wood died as the result of an accident. He was with the Class during its first year, 1878-79, and when in 1897 former members were invited to join the class organization he accepted, but we had the pleasure only once, on February 4, 1904, of having him with us at one of our reunions. For years his residence was at Wayne, Penna., and his business connection with William Wood and Company of

Philadelphia. He was long an active member of the National Association of Woolen Manufacturers and for a number of years served as its President. During the war, he was a Colonel of the First Pennsylvania Cavalry, and was stationed at Camp Hancock, in Atlanta, Ga., with the 103rd Engineers, and with the Q. M. C. at Washington, D. C.

Unfortunately there was omitted from the report of the Forty-Fifth Reunion published in *The Review* the fact that on that occasion, Rufus F. Herrick was elected as Vice-Secretary, to succeed Grenville Temple Snelling, who died April 2, 1920. Herrick is to serve as assistant to the Secretary as much as he may desire, and will have joint authority with him over the funds of the Class.

The permanent address of the Secretary will hereafter be the Statler Building, Boston, to which Walter B. Snow and Staff, Incorporated, advertising agents, moved on January 1.

The Secretary was the sole member present at the Alumni Dinner on January 7. So far as he can recall he has never missed one of these occasions in the forty-five years since graduation. — WALTER B. SNOW, *Secretary*, Statler Building, Boston, Mass. RUFUS F. HERRICK, *Assistant Secretary*, 24 Milk Street, Boston, Mass.

'84 I am informed that Mr. G. L. French has been appointed to succeed C. T. Jarvis, recently deceased, as general manager of the Rutland Railroad.

F. H. Newell's annual letter reports that he has been occupied with studies of the water and power resources of Virginia, visiting districts new to him and looking up possible reservoir sites. He has during the year published articles in the *American Review of Reviews* on the Mississippi floods and the Rio Grande and Colorado Rivers. As an outgrowth of the Virginia work he has been attempting to compile a readable statement of the bases for a state water law, a fascinating undertaking, affording ample opportunity for difference of opinion. The recent floods have made subjects in his field unusually popular with the statesmen — actual or "near."

Dr. Winthrop Holt Chenery, for the past seven years Chief of the Special Libraries Department of the Boston Public Library, has resigned to return to his former position as Librarian of Washington University at St. Louis, where he also taught for a number of years — from 1914 to 1920 — as associate professor of Romance languages. He is an accomplished scholar, whose departure is a loss to the Boston Public Library. — HARRY W. TYLER, *Secretary*, Room 2-261, M. I. T., Cambridge, Mass.

'86 Noyes has recently received another addition to his numerous honors for his work in chemistry. He has been named for the Hughes Medal by the Royal Society of Great Britain.

H. P. Merriam has given to the Institute for the Museum of the Mechanical Engineering Department, the White Steamer automobile that was used by Chief Justice Taft while he was President of the United States.

Locke has resigned the office of President of the Boston Young Men's Christian Union to

which he was elected to succeed the late William H. Baldwin, who resigned in 1907 after a service of nearly forty years. — ARTHUR G. ROBBINS, *Secretary*, Room 1-270, M. I. T., Cambridge, Mass.

'88 George C. Dempsey died at the Phillips House, Massachusetts General Hospital, Boston, on December 9, 1927, following an operation. He was always actively interested in class affairs. During our first year he was Captain of Company A of the M. I. T. Cadets. On the occasion of our twenty-fifth anniversary, he shouldered the burden of bringing out a special edition of *The Tech* entitled "Twenty-five Years Ago," which made a hit at the general reunion of Technology men which took place the same year. While at the Institute, he took Course V, Chemistry. Later, he became connected with his father's business under the firm name of P. Dempsey and Company, Lowell. He is survived by his widow, formerly Abigail L. Hanley, and by their children, Gerald Hanley, Ethel Hanley and Justin Hanley.

The amount subscribed for a Class of '88 section of the new dormitory group was very much understated in the January Review. The Secretary is pleased to report that including a bequest by our late classmate, Russell Robb, the amount now stands at \$38,925 toward the \$100,000 required.

The statement was made in the January Review that our Fortieth Reunion would take place June 29, 30, and July 1. These dates have been advanced one week; therefore make your plans to spend June 22, 23, and 24 at Great Chebeague Island, Casco Bay, Maine. Details will be arranged in ample time.

During a recent visit to Boston, Viscount Willingdon and Viscountess Willingdon were guests of Mr. and Mrs. Edwin S. Webster at their town house, 306 Dartmouth Street. — Miss Marion Talbot, Dean of Women and Professor of Household Administration at the University of Chicago, recently sailed for Constantinople, where she will be acting President of the Constantinople Women's College until June.

The Secretary has received from Stephen Child, Landscape Architect, 538 Merchants Exchange Building, San Francisco, pamphlets entitled "The Regional Planning Organization of the Ruhr" adapted to the Bay Region and "City Planning Procedure for Small and Medium-Sized Cities."

The *Scorpion*, on which B. R. T. Collins served with the rank of Ensign during the Spanish-American War, was mustered out of commission at Philadelphia, on October 27, 1927, after twenty-nine years' service on all seas. — Nine members attended the Alumni Dinner on January 7. — WILLIAM G. SNOW, *Secretary*, 38 Chauncy Street, Boston, Mass.

'90 Henry M. Waite is now located at Temple Bar Building, Cincinnati, Ohio. Chick will be remembered as having been the successful City Manager of Dayton, Ohio, a few years ago. — A card was received by your Secretary in December from Frank Hayes, who is sailing with Mrs. Hayes for Naples, Paris, and intermediate points.

A clipping from the *Boston Evening Transcript* carried the following article: "The

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French Government, tomorrow, will make Pierre S. du Pont of Wilmington, Del., an officer of the Legion of Honor. Paul Claudel, French ambassador, will decorate him in recognition of the great help and encouragement he has shown and interest he has taken for many years before, during and after the World War. Mr. du Pont was made a knight of the Legion of Honor after he had given all the anesthetics used for a year in the French army hospitals. At the same time Dr. Walter Hüllihen, President of the University of Delaware, will be made a knight of the Legion of Honor in recognition of his educational work in France."

Another clipping from a Boston paper records the death of Harry E. Hayes as follows: "Harry E. Hayes, sixty-two, of 6 Middlesex Road, Stoneham, died at his home early this morning. Death was due to heart disease. He had been in ill health for more than a year. He was born in Madbury, N. H., the son of Samuel C. and Elizabeth S. Hayes, and moved to Boston with his parents when he was two years old. He lived in Boston until three years ago, when he came to Stoneham. He was a graduate of the Boston Latin School, Harvard College in the Class of 1888, and the Massachusetts Institute of Technology in 1890. He was a 32d degree Mason, a member of the De Molay Commandery, and a member of the Mystic Shrine. For many years he was employed as an engineer by the Charles H. Tenney Company. He is survived by his wife, Mrs. Emma F. Tilton Hayes, and a son, Alfred Henry Hayes."

At the Annual Alumni Dinner at the Chamber of Commerce on January 7, we were fairly well represented. The faithful ones to show up were Atwood, Burley, DeWolf, Gilmore, Goodwin, Packard, Rogers, Roots, Sherman, Spaulding, and Tilson. A few more of our bunch around the Hub missed it, but we trust that next year they will wake up and show up.

Word comes to the Secretary that Mr. and Mrs. Cabot J. Morse of 330 Dartmouth Street are among the week's arrivals at Ormond Beach, Fla., where they are stopping at the Hotel Ormond.

Your Secretary, with Mrs. Gilmore, left for the Coast and Honolulu the latter part of January and probably will not return before the last of April. Meanwhile, it is up to you fellows to report directly to The Review Editors any news of interest to your classmates as to yourselves or other members. Now get busy and send in something while your Secretary is away hitting the golf ball. — G. L. GILMORE, *Secretary*, 57 Hancock Street, Lexington, Mass.

'92 Although there have been no meetings, dinners or other functions of the Class, we were represented at the Annual Dinner of the Alumni Association on January 7 at the Boston Chamber of Commerce by Braman, Carlson, R. D. Chase, Fuller, Hall, Hutchinson, Lee, and Pettee. A pleasant, unexciting evening was had by all.

Of course you all remember the T-Square Quartette which carried on the year or perhaps two years that the Glee Club was moribund or having a moratorium or something. Here is a letter that will interest you from the bass of that jolly crew, H. J.

Schlacks: "I want to thank you for the story of the Thirty-Fifth Reunion at Harwichport on June 3, 4, and 5. Familiar names and almost forgotten faces passed in review, reading your story of the Reunion. Much like Hamlet's expression, 'Alas, poor Yorick, I knew him well,' which refers to 'Meserve, who is on his way to California.' I wish Meserve had stopped in Chicago on his way through and called on me. And Forbush, Kales, Locke, Littlefield, and Carlson during all the intervening years I have not heard their names nor seen them.

"Not long ago I was in Philadelphia and by a singular circumstance met Edgar V. Seeler. Our eyes were moist at the greeting. I remember also a similar occasion, a meeting with Frank Crosby, and you may remember a member of our T-Square Quartette, Whitman, Crosby, Emery, and Schlacks. Every time I have been down to New York or Boston I have made it a point to look up Whitman, but I have never been able to find a trace of him. There is no family by that name in the telephone book in Cambridge where they lived. I heard some years ago that he was an architect in New York City, but I have never been able to locate him there.

"I think it was very nice to extend to Professor Vogel congratulations on his long and faithful service at the Institute. I remember when he first joined the teaching staff in our freshman year that he was at that time quite a young man.

"I regret exceedingly that I was unable to be present at the Thirty-Fifth Reunion, but I expect to attend the next one. I thank you again for the story of the Reunion, which has revived many pleasant memories." — JOHN W. HALL, *Secretary*, 8 Hillside Street, Roxbury, Mass.

'94 Announcement was recently made in *Science* of the award of the Leslie Dana Gold Medal by the National Committee for the Prevention of Blindness. This medal is another indication of the broad human interest which characterizes Dana, and which has contributed to his success and his prominence in civic affairs in St. Louis.

Any '94 men visiting London during the summer should look up Rigby Wason. A new address for him is 57 Onslow Gardens, London, S. W. 7, England. — C. B. Hubbard has also sent a new address, R. D. No. 1, Cohoes, N. Y. — L. K. Davis reports the Allerton House, 39th Street, New York, as his present address.

H. R. Batcheller has hit the trail. With a car specially arranged for camping, he and Mrs. Batcheller left their home in Washington, N. H., on December 11 for a transcontinental trip, having as its objective a visit to his brother, Professor J. H. Batcheller, '00, at Oregon Agricultural College, Corvallis, Ore. He is taking the southern route, via Gettysburg, the Shenandoah Valley, Memphis, Dallas, El Paso, Yuma, to San Diego, and then up the coast to Oregon. He expects to return sometime in May.

It is with great regret that the Secretary records the death of George Richardson Beardsell of Lynn, which occurred at the Massachusetts General Hospital on January 20. In a letter from Beardsell, received a few weeks ago, he mentioned having been in poor

health for several months, but expressed his usual optimism, and his interest in class affairs. Beardsell was born at Hudson, Mich., April 12, 1871. At the age of fourteen he came to Swampscott to live with his uncle, Mr. Henry Sprague, and attended the Lynn High School, and later entered Technology with '94. He was a member of Sigma Chi fraternity, and has always maintained his Institute connections. Leaving before graduation, he entered on a successful business career. For thirty years he was a member of the firm of Gardiner, Beardsell and Company of Boston, and a member of the Boston Inner Sole Company, the P. J. Smith Company, and the Wallace H. Foss Company, leather firms. He was a Vice-President and trustee of the Lynn Five Cent Savings Bank, a director of the Central National Bank of Lynn, the Boston Woven Hose and Rubber Company, the Lynn Mutual Fire Insurance Company, Lynn Hospital, the Home for Aged Men, and the Lynn Boys' Club. He was a member of the Tedesco Country Club at Swampscott, the Corinthian Yacht Club at Marblehead, the Whiting Club, and the Budget.

In 1899 Mr. Beardsell married Miss Edith Tapley, younger daughter of Henry Fuller Tapley and Ida Jane Tapley. She survives him, as do two daughters, Mrs. Richard B. Breed and Mrs. Laurence B. Leonard. The Class extends its cordial sympathy to the family. In his passing we have lost another classmate who was held in highest regard.

W. H. Bovey, our Class President, is also taking a motor trip to the Coast. He writes, "I am leaving Saturday for Kansas City, where I take my car and drive south to Texas, and then west across Texas to California. The roads are very good between Minneapolis and Kansas City, but as this is not a very interesting part of the trip, I had one of our men, who had to go to our plant in Kansas City, drive my car down last week."

The Boston *Evening Transcript* published on Friday, January 20, a very interesting account of our most distinguished '94 man under the caption, "Abbot of the Smithsonian." [See also page 216 of the February Review. — THE EDITORS.] This appeared shortly after the announcement from Washington that Abbot has been appointed as Secretary of the famous Smithsonian Institution, where he has done such notable work ever since he left the laboratories of Technology. If space permitted it would be a pleasure to present the whole article in these columns. It suffices to say that Abbot is regarded as one of America's foremost scientists, and perhaps the foremost in the world in his special field. His promotion to his new post is most merited, and has come as an appreciation of his remarkable scientific attainments. The *Transcript* article closes with the following statement: "The new Secretary of the Smithsonian has had many scientific honors given him. In his new post he will, it is safe to say, ably guide the Smithsonian in its unending search for scientific truths." An additional honor has since come to Abbot, as his name has been presented by the Nominating Committee of the Alumni Association as a candidate for term membership in the Corporation of the Institute.

A. B. Tenney has also received the honor of nomination for term membership in the Corporation in recognition of the ability and

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character he has shown in his business career and his constant devotion to the well being of the Institute. The Class is honored in both these nominations, for whether elected or not they are the expression of the highest respect and appreciation which the nominating committee, as a representative group of the Alumni, can pay to the individuals so elected for presentation to the electorate.

The class committee on the Dormitory Fund expresses its sincere appreciation for the support received from contributors, and urges the prompt and hearty coöperation (meaning contributing and getting contributions) from those who have not yet added their quota to the fund. We should like to see every living member of the Class represented, regardless of the amount given. It is the spirit rather than the sum which will show where '94 stands in its desire to help the Institute. We need \$40,000 more, and surely 200 men ought to be able to give this. Come across with a will! — SAMUEL C. PRESCOTT, Secretary, Room 10-405, M. I. T., Cambridge, Mass.

'96

The Secretary had a realistic dream one night during the week that these notes are being written. Apparently his subconscious mind could not forget the fact that notes were due, and consequently in the dream Fred Haskell Smith was met face to face on Massachusetts Avenue in Cambridge. After a hearty handshake, a query by the Secretary as to what Smith was doing there brought forth the reply that he was now living in Cambridge and his house was close by and wouldn't the Secretary step in. Eager for news, the Secretary accepted, seated himself, took out pencil and notebook, and started to quiz Smith. The first question the latter could not answer offhand and therefore excused himself to consult his wife for information. Before he got back the Secretary woke up, and consequently the news about Smith is still lacking. The episode made the Secretary appreciate how the man felt who once dreamed that he was invited to take a drink and, as it was a cold day, he decided to have a hot punch. He was told that it would take two or three minutes to heat the water, but unfortunately while he was waiting for the water to heat he woke up. The morals from the foregoing are: to ask easy questions of classmates, and take all drinks straight. It might also be noted that it is a sad state of affairs when secretaries have to rely on spirit messages for class news.

Unfortunately a previous engagement, which could not be broken very well, prevented the Secretary from attending the Alumni Dinner at the Chamber of Commerce on January 7, but Will Hedge, who was there, reports that at the '96 table were Jim Driscoll, Bob Fuller, Will Hedge, Sam Hunt, Henry Jackson, and Joe Knight. In addition, Merryweather, as an officer of the Alumni Association, occupied a post of honor at the head table. Hedge said that it was impossible to extract any items of news from the men present. His twin brother, Henry, had been under the weather for some time, but had now reached a stage where he was getting back to business of a light nature. Hedge sees Sanderson frequently, and Sandy continues to be about the youngest looking grandfather

that any one can imagine. Joe Knight favored the Secretary with a call one day, but could not report anything in the way of news beyond that life was going smoothly with him and he was pursuing the even tenor of his way.

Wayne has been elected President of the Sciencetech Club of Indianapolis, the announcement appearing in the Indianapolis *News* of December 20, with a very realistic picture of our classmate. This Club was founded twelve years ago and consists of about 100 members, who qualify by having been trained in an engineering or scientific institution of learning and of following a pursuit which requires technical application. Although the membership of the Club consists of the engineering and scientific fraternity of Indianapolis, it was primarily conceived and established to foster among those men a brotherly interest in their fellow men and in their civic and social relations. Since the very beginning, Wayne has been an officer, being first the Secretary and later a director. Arthur Baldwin sent greetings from Paris to both of the Class Secretaries. He is apparently finding life very pleasant in the gay capital and the job which he holds is one of the highest in his company.

The annual contribution of the Class, amounting to \$50, for Institute athletics was sent to Dr. Rowe, Secretary of the Advisory Council on Athletics, and a formal acknowledgment couched in his usual polished phrases was received. — The issue of *Science* dated December 30 contained on page 653 a short but vivid description written by Jacobs on the ravages of the Vermont Flood in the village of Cavendish. — Buster Crosby, having no news to send, recently forwarded a piece of mineral which had come to his attention and which was supposed to be of value. However, the value was found to be non-existing, since the specimen was merely a piece of quartz containing iron pyrite. — Mike Sturm has promised to be in Boston the last of January for the purpose of attending his grandmother's funeral or some other family party. It is hoped that he will also bring on a bunch of information for the next issue of *The Review*.

M. L. Fuller is off again this winter with his wife, and a card arriving early in January stated that they were enjoying a week's stay at Colon before sailing on January 13 for the Pacific ports of Central America and Mexico. Fuller said that the sole interest in Colon at the moment was Lindbergh, and even politics had been forgotten. The cities were all decorated elaborately and special postage stamps issued in his honor. Mort Tuttle is another man who is away on a pleasure trip, having sailed with Mrs. Tuttle on January 7 for a six weeks' Mediterranean trip. His organization, the Morton C. Tuttle Company, finished not long ago the water power project at Gulf Island, Maine, which is one of the largest in the state, and at the present time contracts are being carried out by his firm in Maine, Massachusetts, and Pennsylvania, and include various construction lines from the simple matter of building a dwelling house up to the development of water power plants. — CHARLES E. LOCKE, Secretary, Room 8-109, M. I. T., Cambridge, Mass. JOHN A. ROCKWELL, Assistant Secretary 24 Garden Street, Cambridge, Mass.

'98

The date of the Thirtieth Reunion is set for Friday, Saturday and Sunday, June 1, 2, and 3, and the place will be within striking distance of Boston, so that all who desire to can attend Class Day on Monday, June 4, and Commencement, June 5. Detailed notices will be mailed to all members of the Class when the plans are perfected.

Elliot Barker, like several of our Class, thought that he had practically retired from business, but finds that he has not. Added to his at present increasing responsibilities he is finding much to do as a representative in the Massachusetts Legislature.

Lester D. Gardner had another interesting experience in flying over part of Europe this last summer. The summer before he flew 21,000 miles over foreign air lines, going as far north as Stockholm, east as far as Moscow, Constantinople and Bagdad, south as far as Cairo and Morocco. Last summer he went over to attend the meeting of the American Legion in Paris, and from there went to Venice, where he was the Official Representative of the National Aëronautical Association at the Schneider Cup Races. Here he saw speed records broken by British aircraft, the speed for the 250-mile course being over 282 miles an hour which indicates a speed of about 300 miles on the straightaway. After the races he flew over the Alps from Venice to Vienna, and from Vienna to Prague and from Prague to Berlin. From Berlin he flew to London. Returning to Italy he was the official representative of the United States Department of Commerce at the Fourth International Congress of Aërial Navigation at Rome. Lester has sold his business to his associates and plans to spend much of his time in travel during the next few years. He has just started quite unexpectedly in the middle of January on another trip to Europe on aëronautical business.

George W. Craven, President of the State School of Mines at Butte, Mont., tendered his resignation on December 16 to the Montana Board of Education. The resignation becomes effective June 30. Dr. Craven has been at the head of the institution since 1921.

At a meeting of Delta Omega, the national honorary public health society, on October 19, 'C.-E. A. Winslow, Anna M. R. Lauder Professor of Public Health at Yale University, was elected President. — ARTHUR A. BLANCHARD, Secretary, Room 4-160, M. I. T. Cambridge, Mass.

'99

Arthur Brown reports that he and his family spent four days during the holidays as the guests of Haven Sawyer and Mrs. Sawyer at Bangor, Maine. They went up for winter sports, but the weather turned warm and a regular thaw set in. Therefore, the winter sports were non-existent, but they had a delightful time, nevertheless.

The Sawyers live on a farm of fourteen acres, only two miles out from the center of Bangor, where they have all the space and advantages of country life with convenient access to the city. They have their own horses, cows, pigs, poultry, bees, sheep, orchards, vegetable gardens, well, ice house,

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dairy, automatic pump, and everything else needed to supply food and water for a large family.

One particularly interesting episode was a visit to a silver fox farm at Lincoln, fifty miles north of Bangor, which Haven is managing and has brought up to a flourishing and prosperous condition from the brink of failure. The foxes are confined in pens made of chicken wire in an enclosure surrounded by a high board fence, and every possible precaution is taken to keep them sound and healthy. A pan containing disinfectant is placed before the door which enters the enclosure, so that any one going in has to step in it. The foxes ready to be killed for their fur are first led out into a large enclosure where they have room to run about and get into prime condition. This year they are selling about 800 skins, I believe, and next year expect to have a larger crop.

Last month's news column carried a brief notice that G. A. Pennock had been appointed superintendent of the inspection branch of the Hawthorne Works of the Western Electric Company in Chicago. The notice was modest because Pennock sent it in himself, but we have gotten more details from another source, which we are glad to pass along: "The Hawthorne Works of the Western Electric Company in Chicago specializes in the manufacture of telephone apparatus for the Bell System, is the largest institution of its kind in the world, and has a personnel of around 30,000 workers. The chief divisions within the plant come under the headings of industrial relations, development, operating, production, inspection, technical and clerical. Under the jurisdiction of Mr. Pennock, as superintendent of the inspection branch, are inspection of goods manufactured to see that they measure up to the standard set by the Bell System. Raw materials are inspected by this organization before they pass into the hands of the operating branch, while as much inspecting is carried on during fabrication as the inspection superintendent deems necessary to insure quality.

"Mr. Pennock entered the service of the Western Electric Company in 1906. In 1912 he was transferred to Antwerp, Belgium, as plant engineer of the Bell Telephone Manufacturing Company, then an associated company with the Western Electric. Two years later he returned to the Hawthorne factory in the same capacity, and in 1922 was made superintendent of the technical plant. Two years later, the responsibilities of works engineer were added."

Arthur B. Foote writes from Grass Valley, Calif.: "I am beginning the new year by at last enclosing my check for two dollars and doing my bit toward answering your appeal for news. As I am still general manager of the North Star Mines Company and as such have to stick pretty closely to the job of trying to make this gold mine pay, I do not see much of the outside world and fear that my news will not prove to be of very general interest. The trouble with gold mining in these days is that the price of the product is fixed, and, as every one knows, costs have gone up sixty per cent since the war. It follows that the profit is sixty per cent less, and, as the profit was less than sixty per cent before, there is no profit now.

"In the case of this mine, it became evident three years ago that the mine must either be closed down, or a lot of money spent on it on the chance of opening up a new and more profitable area of ground. It was decided to take the chance and spend the money, and that is what I have been doing for the last three years, in addition to the regular operation of the mine. Two incline shafts have been sunk following the vein, one a distance of 1,900 feet and one 1,300 feet. Besides this, a vertical crosscut shaft was sunk 2,000 feet, and over 20,000 feet of drifting and so on was done to explore the vein reached by the shafts. The total cost was about \$750,000. The bottom level is now 8,600 feet from the surface by way of the main incline shaft, or 3,500 feet by way of the vertical shaft. This makes it 1,000 feet below sea level.

"There are many interesting engineering problems connected with shaft sinking, and there is some excitement in it, as you can never be sure beforehand of just what you are going to encounter in the matter of water or rock. The pumping system is particularly important, because if the pumps fail to keep the water out not only does all work have to stop, but the pumps themselves may be lost with nothing left to pump them out with. About 500 tons of ore a day are mined, with about 250 men working underground and 100 on the surface. This does not require a very large engineering staff. I have a mining engineer for an assistant and there is a surveyor. It takes about 2,000 horse power to run the plant. One of the pumps operates against a 2,000-foot lift."

Lewis W. Riddle has just been made President of the Cody Trust Company of Chicago, Ill. This company has a paid capital and surplus of over \$1,100,000.

W. A. Hazard has responded wholeheartedly with the following: "In clearing out my desk today to get a clean start on the new year, I found three letters from you received during the past year, asking for news for *The Review*. Such persistency certainly deserves a reward, so in addition to enclosing check for the yearly class dues, I will try to give you a brief record of my activities since I left *Technology*.

"For the first three years I was assistant engineer in charge of double track construction through Iowa for the Chicago and Northwestern Railway Company, and left them at the end of that time to become general superintendent of a contracting company. This company took on some government reclamation work in South Dakota and Montana which proved unprofitable and disastrous. In 1906 I went back with the Chicago and Northwestern Railway as resident engineer on the Fox River Bridge at Green Bay, Wis., and then to the Mississippi River Bridge at Clinton, Iowa, in the same capacity. In 1907 I took the position of manager of sales for the Worden-Allen Company of Milwaukee, Wis., in charge of their Chicago office. In 1909 I went to Buffalo, N. Y., with the Lackawanna Bridge Company, and remained there until 1923 in the position of chief engineer and assistant manager, and was transferred to Bethlehem, Penna., at the time of the consolidation of the Lackawanna Companies with the Bethlehem Steel Company.

"I have remained in Bethlehem since that

time, and as superintendent of erection for the Bethlehem Steel Company I have under my charge all of the bridge and building construction work handled by the Company, both for commercial clients and a large part of the plant construction work that Bethlehem has been doing for the past few years. Among these have been the towers for the Delaware River Bridge at Philadelphia; the Newark Bay Bridge for the Central Railroad of New Jersey at Bayonne, N. J.; the Niagara River 'Peace Bridge' at Buffalo; and the bridge from Elizabeth, N. J., to Staten Island, N. Y., for the Port of New York Authority.

"In 1900 I married Louise New of Des Moines, Iowa, and we have two sons. Henry S., born in 1902, is now resident engineer on construction for Bethlehem Steel Company. He is a graduate of Rensselaer Polytechnic Institute, class of '24. The second son, Robert A., after two years at Lehigh University, left college to enter business with the Bethlehem Textile Company." — W. M. CORSE, *Secretary*, 810 18th Street, Washington, D. C. A. H. BROWN, *Assistant Secretary*, 53 State Street, Boston, Mass.

'00 The Annual Dinner of the Alumni Association in January was the occasion of the gathering together of some of the faithful. The Secretary was not there and doubtless his ears should have burned by reason of the caustic criticism and complimentary remarks lavished upon his absent head. That they didn't burn is to the credit of some friendly bacilli which had effectually plugged them as well as all other avenues of approach to the same suffering head. Both Bowditch and Allen, staunch reliable wheel-horses, thoughtfully helped out the situation by sending in a list of those present. Allen, Bowditch, Cotting, Draper, Dunbar, Fitch, Hurd, Ingalls, Perry, Silverman, and Sperry formed the group. The order of naming is of alphabetical importance only. Silverman is just now appearing much in print in connection with the innovations and improvements recently inaugurated by the Boston and Maine Railroad.

Elbert Allen returned this fall from an extended European trip, during which he visited Poland, Germany, Italy, and Switzerland. This is his fifth business trip across the water in the interests of Stone and Webster with whom he is associated. The special object of this last trip was to make a study of conditions in Poland, with reference to a proposition to start a large lighting and power system which, under a special franchise, would cover a large part of the country. Previous trips had been largely confined to Italy, where his work was in connection with bankers' reports and the appraisal of hydro-electric property. Elbert has risen high in his chosen field and is already sure of his niche in 1900's Hall of Fame. — GEORGE E. RUSSELL, *Secretary*, Room 1-272, M. I. T., Cambridge, Mass.

'01 The Annual Alumni Dinner, like the darkie's Christmas, has come and gone, and so far as the participation of the Class of 1901 is concerned in that somewhat grisly entertainment, the similarity is perpetuating. Two members of the Class at-

1901 Continued

tended, the Secretary, and Charles Bittinger; the latter, I imagine, in search of local color. With pity on our forlorn condition, the Committee had placed us with the Class of 1902 which occupied the remaining eight seats. Cheered by the solicitude of Fred Hunter and his little mates we survived the meal, the composition of which was so good as to make one question if it could really be a Technology gathering. The average was struck, however, by the execution, and I feel certain that the uncrowned queen who presided over our culinary destinies had at some time been an active member of that marvelous group of jugglers, the Agoust family. Certainly only a trained hand could so spin a modest plate as to lay a thin layer of squash on each upturned countenance. After we had fed to the point of repletion we listened to the speakers with keen interest and then, sobbing bitterly, Bittinger and I said farewell to our temporary hosts — merely a phrase of courtesy, as we paid for our own dinners — and silently stole forth into the frosty night. Far be it from me to say vain things, but, robbed of the adequate alibi of Walker Memorial food, I fail to see any really valid excuse for some others of the Class not having graced the occasion. However, another year we may hope for better things.

Class dues and class information is filtering in with a steadily abating velocity. I deplore both facts.

Charlie Tufts who was for many years with the Semet-Solvay Company is now Assistant Vice-President of the Atmospheric Nitrogen Corporation. He deplores the use of my term "interesting" in my conventional query, and implies an innate modesty as the inhibiting factor. He may be right, but I doubt it. Long contact with certain of the stalwarts of this, our little group, has at times led me to doubt if the word "modesty" has not become obsolete and its implied attribute non-existent. My pessimism would be confirmed but for the elimination of nether limbs as a talking point by the younger generation.

Philip Wyatt Moore, still seeking sylvan seclusion, writes me that he is branching out. Inspired by the noble example of the Strawberry King, he has gone into ranching and has acquired 4,200 acres in the garden state of Wyoming. The crumple in the rose leaf as voiced by him is that even in that favorite spot, one — he doesn't say which one — must build the fire in the morning, milk the cows, and feed the chickens. Ameliorations are the concomitant exercise, and, unobtrusively, the fact that the fishing is good. Furthermore, as I remember it, Philip has offspring of an age when they might contribute to the family weal unless the self-determination of the small republic has been carried to a stultifying point in their upbringing. And in that connection let me say with that clear perspective which no fond father can ever hope to attain, that this obtrusion of the second generation into the affairs of their elders is the canker at the heart of our so-called American civilization. When they attain the years and dignity of post-adolescence, — and, by the way, Horace Johnson's nice youngster is general manager of this year's Tech Show. Freddy Freeman's boy, Bob, is President of the freshman class, and Freddy Coburn's olive branch has but

recently left the regulation of the destiny of Technology to take up similar philanthropic work in what is known as the outside world — but I wander from my subject, a sure sign of the approach of that senility with which I have been credited for the last twenty years.

Loring Danforth writes in from Buffalo that he has just completed twenty-five years with the company of which he is now the President. He adds as a point of poignant interest to some members of the Class that his golf game is better than in any previous year. (Fall River and Boston papers please copy.) Dan's firm did the heating and ventilating work on Boston's "newest, biggest, and best hotel," the new Statler, and apparently they are responsible for this highly important function of most of the Statler properties.

Word reaches me that L. Herbert Bigelow is now to be found in the Territorial Office Building of Honolulu, Hawaii. He is coyly silent as to what he is doing there, but I hope Horace Johnson may enlighten us.

From one of his grateful guests I quote the following: "Bill Vermilye was a prince in his provision for a luncheon at the Union League Club at the Technology Clubs Associated Convention. We had a good time and Bill was some host." It was this same Bill who accompanied Freddy Boyd and the writer to the opening of the Dutch Room in the then newly built Hotel Touraine, an episode of no small historic interest as it was then that Freddy, aided by a silk hat and his normally guileless expression, began his collection of beer steins for which the Metropolitan Art Museum is now in negotiation. Bill was always gourmet rather than gourmand, and with my own later addiction to the pleasures of the table, it is a matter of profound regret that I missed what was evidently a most successful party.

The Boston members of the Class will shortly hold a dinner, at least Charlie Bittinger and I are going to eat together some night, and we hope to corral a few more of the wanderers. I shall have much to retail after this event — always assuming that the Editors of this journal will regard my efforts with a charitable eye. The hour grows late, these notes are due. I close with a reminder that our fiscal year terminates on July 1. There is some pith in these words. — ALLAN WINTER ROWE, *Secretary*, 4 Newbury Street, Boston, Mass. V. F. HOLMES, *Assistant Secretary*, 131 State Street, Boston, Mass.

'02 Chicago classmates have had a Ladies' Night, the first one ever held by '02 west of the Hudson. Dinner was served at the Old Colony Club on the evening of January 10, with Vice-President and Mrs. Millar, Mr. and Mrs. Durgin, Mr. and Mrs. Fisher, Pete Currey with Miss Carolyn Hill, Ken Lockett with Mrs. McCoy, Mr. and Mrs. FitzGerald, and Ned Cutter. After the dinner the reunion film was shown with Durgin operating the projector. This was followed by other interesting pictures and then the reunion film was shown a second time. The meeting was reported most successful and we trust is the first of many such gatherings to be held in Chicago.

Grant Taylor was married on the evening of Saturday, January 7, at Washington,

D. C., to Miss Susanna Stevens Sparks. The Taylors will be at home at 1171 Boylston Street, Boston, before this issue of The Review is out.

At the Annual Alumni Dinner in Boston on the evening of Saturday, January 7, there were present, Thurston, Moore, Porter, Fowler, Philbrick, Davis, and the Secretary. Davis, who has been in poor health for some years past, received a warm welcome and the classmates were glad to know that he was enough better to be able to attend. — McKechnie is living at 9 Messenger Street, Canton, Mass. — FREDERICK H. HUNTER, *Secretary*, Box 11, West Roxbury, Mass. BURTON G. PHILBRICK, *Assistant Secretary*, 246 Stuart Street, Boston, Mass.

'04 The Secretary wishes to acknowledge on behalf of his classmates receipt of a letter from The Review Editors, appealing for a full set of notes for the March issue, and in response submits the following, which, as far as he is concerned, constitutes a full set because it comprises all the news which he has been able to get together.

Excepting for the purpose of recording the fact that Hump Haley availed himself of another opportunity to keep intact his record of attending alumni functions, no mention would have been made in these notes of the participation of this Class at the Annual Alumni Dinner. Hump was there in all his glory and constituted fifty per cent of the class attendance, the other half of the aggregation being Dimock. In his report to the Secretary, Haley was very reserved in his opinion of the affair, although he admitted that one of the speakers was very interesting.

The following item from the *Engineering and Mining Journal* of June 18, 1927, submitted by Professor Charles E. Locke, '96, gives some further information regarding Riddell's trip to Central America which was mentioned in a previous issue of class notes. "Guy C. Riddell, accompanied by Mrs. Riddell, has returned to New York from Central America. During the last three months his party penetrated remote mining and timber regions of Panama in the examination of new manganese, iron, gold, copper, and mahogany properties. Mining concessions and water-power sites, as well as railroad outlet to the coast, were traversed and photographed by airplane. The concessions were covered as thoroughly as possible on foot and later traversed by plane for alignment of data. Two army planes were used for the work over uncharted country, one carrying the photographic equipment, the other a convoy. A flight of five hours out of Panama City covered 450 miles of country in the interior."

The issue of *Science* for July 15, 1927, contained the following item: Dr. Elmer A. Holbrook for the past five years Dean of the School of Mines and Metallurgy at Pennsylvania State College has resigned. Dr. Holbrook is to become Dean of the Combined Engineering and Mining School at the University of Pittsburgh. It is the impression of the Secretary that Holbrook's change of location has been the subject of previous notes, but in order to make sure that the fact is not omitted, it is inserted here.

A letter from Leon H. Smith, under date of

1904 Continued

January 9, enclosed the following clipping from the New York Times dated December 24, 1927, telling of the death of Henry W. Rowe who was a member of Course IV, taking his Master's degree in 1905: "Henry W. Rowe of Pecks Land Road, Greenwich, died suddenly yesterday afternoon in the Union Hospital at 130th Street, New York, from acute gastritis. Mr. Rowe, who was an architect, left his home yesterday morning and went to his New York office at 14 West Forty-fifth Street as usual. In the forenoon he complained of feeling ill, and started for home in an automobile. His condition grew so much worse that he was taken into the Union Hospital, where the end came a short time afterward. Mr. Rowe was born in Lawrence, Mass., forty-seven years ago, and was graduated from the Massachusetts Institute of Technology in the Class of 1904. He was a member of the Greenwich Polo Club, the Greenwich Field Club, the Indian Harbor Yacht Club, and had been a member of the Zoning Commission here since its organization in February, 1926. Besides his widow, who was Miss Madeline Kingman of Yonkers, he leaves two sons and a daughter."

No other items of news have come to the Secretary's attention and so he will bring these notes to a close with the statement that the Annual Reunion of the Class will probably be held at East Bay Lodge, Osterville, Mass., on June 22, 23, and 24, 1928. Further notice of particulars of the Reunion will be sent out in due time. — HENRY W. STEVENS, *Secretary*, 12 Garrison Street, Chestnut Hill, Mass. AMASA M. HOLCOMBE, *Assistant Secretary*, 3305 18th Street, N. W., Washington, D. C.

'05

Having gotten Bob Adams' address corrected last month, we find he has moved again.

But it is nice to have known how "Yreka" was pronounced, anyway. Bob says, "When you inquired how I pronounced the name of my town — Yreka — you doubtless had no idea that it was in the county of Siskiyou. Otherwise it would have seemed a most appropriate name for the county seat. The pronunciation is best accomplished by a person with a tendency to stutter, with the result 'Y, Y, Y, Y, Reka,' thus dividing the name into its two component parts which the Indians say signifies 'Big Mountain.' The country is a jumble of mountains, but above them all towers the white majestic peak of Mount Shasta, gleaming against a blue sky, and easily dominating every other peak within the range of the eye. So Big Mountain is correct enough with its 14,000 feet of altitude in comparison with the 5,000 or 6,000 feet of its neighbors. I don't know what Siskiyou means, but I have no doubt it is equally appropriate and it has the right sound anyway for a vast expanse of rugged mountains, canyons, and topsyturvy lava flows."

"My particular function here has been to satisfy all the clauses of a contract to build an irrigation canal to supply a valley of moderate size which miraculously occurs in the midst of these endless mountains. This canal differs very little from other irrigation supply ditches except that for many miles it passes through lava flows of basalt. This rock resembles a petrified sponge in appearance; but when it comes to drilling and shooting it may truly be

said, to use the slang expression, 'to resemble nothing human.' After a few months of blasting I look back with kindest feelings upon diorite and granite. The canal is twenty-one miles long, ten feet wide on the bottom, from four to twenty feet deep, and produced about 220,000 cubic yards of ordinary excavation, with something like 80,000 cubic yards of rock. While not yet entirely completed I consider that the last lap has arrived. So I have moved my base a few miles to the new town of Mount Shasta, which is on the main line of the Southern Pacific Railroad and also on the lower slope of the mountain of that name. Here we are building a very interesting highway across the mountain slopes. The standards are high, twenty-four-foot roadway, maximum grades six per cent, maximum curves of 400-foot radii, making a mountain highway on which forty miles an hour will be a safe speed. Just now we are building it with two feet of snow to contend with, but the old-timer weather prophets cheer us by saying that it will soon melt and we hope they are right for we want to finish by June 1. Then the tourists can see if the new flivver will actually do its sixty miles an hour up here in the mountains — as advertised. All this talk of mine about snow doesn't sound like California. So in justice to this remarkable state I must add that through trains pass this town every few hours. Any one of them passes beyond the snow in fifty miles, and after a twelve hour ride they will take any one to the tempered shores of San Francisco bay — for a description of whose charms I refer all inquiries to 'Californians Incorporated.'"

Ralph Patch fills up a column in the January '06 notes. How does he get that way? He's on our list and we have written him up quite decently. Maybe Ralph has so much news that he can feed two classes. We have never given him a whole column. Perhaps, like Jimmie Banash, he forgets to pay dues to either Class but tries always to be on hand when either is having a nice party. Our turn next. Having half lost Ralph, we are pleased to hear that Charlie Saville, of Ralph's Course too, desires to affiliate with us although he graduated later.

The several references to "Dr. Lewis" in the January notes may seem formal to Doc's friends. They do to us. We didn't do it. The Editors apparently thought we were too familiar with the Director of the Research Laboratory of Applied Chemistry. They didn't realize that the degree of Doc was conferred upon him way back in high school, long before he accepted something in evening clothes from some German university, and that he has been affectionately called "Doc" ever since.

Of late years we have received a number of Christmas cards from members of the Class. For beauty and craftsmanship we choose those of Claude Anderson and Sid Strickland. For originality the award goes, uncontested, to Carl Graesser. There was a time when Grafton Perkins would have been very honorably mentioned but that was before he settled down sedately in Cambridge. — Only seven Fivers sat down at the Annual Dinner of the Alumni Association on January 7, an unusually small number. They were Ball, Barrier, Boggs, Buff, Damon, Donald, and Wentworth. — Fred Abbott has retired from the Lord Electric Company and formed the

new organization of Macfarlane and Abbott, Inc., Electrical and Mechanical Construction, 46 Cornhill, Boston.

Logan Hill is Vice-President of the American Freight Service, Inc., Suite 1008, 17 Battery Place, New York. He writes, "Our Company is engaged in three operations as follows. First, they manufacture and sell the so-called Roloff Demountable Body Equipment for automobile chassis. This equipment is in use by a number of the railroads, storage warehouse companies, and in and around Boston by such firms as United Drug, Jordan-Marsh, Economy Stores, First National Stores, and so on. In a nut shell, the Roloff bodies double the tonnage that one truck chassis can handle in a day and reduces the cost of handling material about fifty per cent. Our second activity consists in operating flat-car and box-car containers ("Freightainers") in regular service on the railroads and such service is, at present, being operated out of Boston on the Boston and Maine daily. The containers are loaded at a store or factory, transferred to a special railroad platform by our trucks and pushed on flat cars. The train of flat cars moves out that night to the various destinations where the containers are handled the same way, thus effecting store-door delivery and practically making an express service of less-than-carload freight. The third activity will consist of applying this container principally to the shipment of less-than-carload lots of freight by the various steamship lines, the use of the container in this instance effecting a saving of about \$2.00 per ton on stevedoring costs." — ROSWELL DAVIS, *Secretary*, Wes. Station, Middletown, Conn. S. T. STRICKLAND, *Assistant Secretary*, 20 Newbury Street, Boston, Mass.

'06

The Secretary regretted his inability to be present at the Annual Alumni Dinner, thereby breaking a record for attendance which extended over a number of years. The following letter from the Assistant Secretary explains itself, and it is very encouraging to note that the '06 attendance is increasing each year. Now for Ned's letter: "Your telephone call early Saturday morning on the seventh, the date of the Annual Alumni Dinner, received attention as soon as I got in the office, but that was a little after one o'clock and you had left for the day. As you did not turn up for the Dinner, I assume that the call was to tell me you would not be there and to suggest that I send you a report of it for the next Review. So here goes."

"We should feel gratified or at least satisfied with '06 attendance as the Dinner had little, if any, advertising, at least on my part. I did urge some of my neighbors to come in for it, including a few classmates. I think, personally, that one of the most valuable things about the Alumni Dinner is the opportunity to meet and talk with not only our own classmates but other acquaintances and friends we made in school and more recently — particularly the older and younger men in one's own community, our neighbors. Technology men don't wear badges on the street or the train and most of them are not good advertisers and it's a fact that one can live almost next door to a Technology man for

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some time and not know him as such until you run into him at the Dinner.

"We are rapidly improving our attendance average. This year there were nine of us, as follows: Herbert Ball, who came down from Lowell and can be counted on to show up for the Dinner; the same thing might be said about W. G. Abbott, Jr., who fortunately was not snowed in up country; Walter Davol came down from Manchester, N. H., and asked me about a great many of the fellows he hadn't seen for some time; Arthur Bellamy, who is now Treasurer of the Beacon Engraving Company here in Boston, showed renewed interest in class affairs; Charlie Mowry and Henry Ginsburg were there, of course, the former fortunately being at home between trips and the latter anticipating an early departure for somewhere in Florida with his family. This trip will be more or less of a wandering one so Henry tells me, and he expects to be gone a couple of months or so. Ralph Patch claims that like the reports of some people's deaths, the recent account of his affiliations was grossly exaggerated. In addition to his always-full program, Ralph has been busy of late supervising the details of construction and equipment for a sizable addition to their plant in Stoneham. Last but not least, the father of the class baby lived up to his reputation as the old reliable and came in from Fitchburg. I have an idea that if we begin to talk about it early enough and continue to talk about it vigorously enough, Abe and Mrs. Sherman can be induced to bring Miss Sherman along to the next June Reunion.

"As for the meeting itself, the Chamber of Commerce lived up to its reputation as a good provider and all the talks were interesting. Horace Ford's new movies of "Living and Working at Tech," while they can only hit the high spots, are, nevertheless, very well done and will carry a true and vivid picture of the Institute wherever they are shown. The rest of your fellows certainly missed a good time and I hope you all firmly resolve to attend the Alumni Dinner next year, regardless.

"Honors have recently come to two members of the Class and in both cases their election to high office is based on devoted service. Joe Santry, at the annual meeting of the Corinthian Yacht Club, was reelected Commodore. Joe is taking a very active interest in yachting and is doing a great deal to popularize it. Perhaps you have read an account of the cruise to Gloucester which he gave to the junior skippers last summer. If the Class only had a few members like Joe we could make the next class reunion take the form of a run to Bermuda and back.

"At the annual meeting, on the fourteenth, of the New England Insurance Exchange, Malcolm Wight was elected President of that organization, a well merited honor and reward for his activity and effective work in his chosen field.

"Charlie Kasson has come to the rescue of the more or less bewildered public which is trying to keep pace with the rapid development in telephony and radio. Perhaps you saw Charlie's letter to the editor of the Boston *Evening Transcript* a week ago, telling us that "television" is not that at all, but 'tele-sight.' He exhorts us not to 'confuse sight with that higher order known as vision.'

"In conclusion, Jim, it might not be amiss to give some publicity to the campaign which the Secretaries are about to launch, to secure the proper participation of the Class in the dormitory construction program. By the time these notes reach the members of the Class in *The Review* they will have received our urgent invitation to do their bit in making our class quota. If any of the Class have neglected to 'obey the impulse,' don't put it off any longer. Mail your check now."

The above letter includes one or two items which the Secretary had received from other sources. Charlie Wetterer thoughtfully sent a clipping from the Boston *Evening Transcript* which advised of Malcolm Wight's new job. Also a notice was received from the Beacon Engraving Company of Bellamy's election as Treasurer. It is very encouraging to get two notices of the same item as there have been times when a single notice could not be obtained. The Bell System *Technical Journal* in its July, 1927, issue, carried an article of which Ray S. Hoyt is a co-author. Hoyt's activities as an author of scientific papers have been referred to previously in our notes.

We are indebted to Ralph Clarke for the following which appeared in the January 1, 1928, edition of *Laundry Age*: "Stewart Coey Elected Head of Asher Company—The Asher Manufacturing Company, prominent manufacturers of laundry machinery, during the past month has experienced several changes in its executive personnel. Stewart C. Coey, Treasurer and General Manager of the company since 1921 and widely known in laundry machinery circles, has been named President. Mr. Coey is a graduate of the Massachusetts Institute of Technology. For nine years after his graduation he was associated with the Youngstown Sheet and Tube Company of Youngstown, Ohio, and for some time prior to his connection with Asher he was with the Celluloid Company of Newark, N. J. His six years in the laundry machinery business have given him an extensive knowledge of the laundry business and he is well equipped to handle his new high post. Under his direction the new Double Asher Ironer, the Imperial Washer, the twenty-eight-inch Hi-Speed Extractor and the new Low Temperature, High Volume Tumbler have been perfected.

"Mr. Coey, in an interview, declared that the Asher Company will continue its progressive policy and market only equipment that enables the laundry owner to turn out better work at materially reduced production costs. 'For many years,' declared Mr. Coey, 'it has been our primary interest to help laundry owners expand and develop their own business. The Asher Company was among the first to bring out the type of service that brought volume to the laundry plants. We have always sought to design machines that will fill the needs of the laundry owner as they arise, and this progressive policy by all means will be maintained. At the threshold of the New Year, we look forward to an era of unprecedented expansion of not only our own business but of the entire laundry industry.'"

Notice has been received of the death of Dr. Leslie T. Vinal, 9 Aldersey Street, Somerville. Dr. Vinal studied chemistry at the Institute. It is understood that she had been in ill health for some time.

Members of the Class will be interested to know that we have just made our annual contribution of fifty dollars to the Alumni Advisory Council on Athletics. This is in accordance with the class vote taken some years ago.

The following was written upon Furer's Christmas card to the Secretary, mailed at Honolulu, December 17, 1927: "Sorry my name didn't appear on that radio message. I happened to be out of the office when Horace Johnson called me up, and they couldn't wait. Anyway, my Aloha was with you as it has always been, especially since that June Reunion in Old Lyme in 1926."—Incidentally, the Secretary has just heard indirectly from Furer by means of a letter, mailed from Honolulu, January 8, 1928, from the Secretary's sister who is on a world cruise. She expressed pleasure at meeting Mr. and Mrs. Furer and the two boys, and being entertained by them and having a chance to see their attractive home. Bill sent word that he wishes to be remembered to Kemo and hoped that he (Bill) would be back for the Twenty-Fifth Reunion. The circle is now complete as the last mail included a letter from Furer with a version of the above mentioned visit. Bill concluded by sending his regards to Ned Rowe and the rest of the '06 bunch. — J. W. KIDDER, Secretary, 8 Harrison Avenue, Boston, Mass. EDWARD B. ROWE, Assistant Secretary, 11 Cushing Road, Wellesley, Mass.

'07

Tom Gould has transferred his business associations from Providence, R. I., and is now associated with Walter E.

Silbee at 100 Ames Building, Boston, as a water-front engineer, studying problems of coast line development, including breakwaters, wharves, and so on. Tom and his family, consisting of his wife and two children, are still living in Providence, but they plan to move nearer to Boston as soon as conditions permit. — In the Arizona *Mining Journal* issue of December 15, is a statement that John G. Barry, who is a geological engineer, with offices at 613 Mill Building, El Paso, Texas, has been placed in charge of the newly organized exploration department of the Howe Sound Company, which is operating in British Columbia and in Chihuahua. — R. H. Willcomb, who with Albert Wiggins represents '07 in Great Falls, Mont., is Treasurer and Manager of the Great Falls Iron Works, where he has been since August, 1925. Previous to that he was engaged in various interesting enterprises calling for mining or civil engineering knowledge. Willcomb is the father of four girls, the family home being at 1509 Second Avenue, N., Great Falls. Albert Wiggins is one of the foremost citizens of this city. Besides being general superintendent of Great Falls Reduction Department, Anaconda Copper Mining Company, he is a director of the First National Bank and trustee of a school district, and has been President of the Rotary Club and of the Chamber of Commerce. Albert has three children.

In the January Review was a paragraph regarding L. C. Hampton, which we can now supplement as the result of a letter dated December 12, received from him from his address at 66 Pitt Street, Sydney, Australia. He writes: "On September 1, I was made a

1907 Continued

director of the Atlantic Union Oil Company, Ltd. This company is a combination of the Atlantic Refining Company and the Union Oil Company of California in Australia and New Zealand. The object of the newly formed company is to install bulk storage stations for gasoline and kerosene, transport same products from the States, erect service stations and later, refineries. I have full charge of all the engineering and construction. We expect to spend about two and a half million dollars the first year. At present we are erecting storage tanks and warehouses at Melbourne and Sydney in Australia, and Auckland and Wellington in New Zealand. I have also to report the sad loss of my wife, who passed away from heart disease on November 22, while I was in New Zealand. She was a Simmons College girl and I met her while I was a freshman at Technology. We were married in 1909 at her home in Grand Rapids."

In looking over the 1927 edition of "Who's Who in America," the other day, we discovered the name of another '07 man—none other than Ralph G. Hudson, who is Associate Professor of Electrical Engineering at Technology, Professor of Electrical Engineering at Lowell Institute School, consulting engineer for Estey Organ Company, and other firms. Ralph is the author of "The Engineer's Manual," used by practically every engineer in America and said to be the only book adopted jointly by the United States Military Academy and the United States Naval Academy; also of "A Manual of Mathematics," "A Table of Integrals," "Engineering Electricity," and "A Manual of American Sports" (now in preparation). In 1918 he published "Research in Arc Welding," now generally recognized as "Hudson Theory." Ralph's home is at 45 Ashton Avenue, Newton Center, Mass., where he lives with his wife and four children.

Emory G. Hukill, a Course II man, is President of the American Petroleum Products Company of Cleveland, Ohio, President of the Allegheny-Seaboard Oil Corporation of New York, President of the Ajax Oil Company of Buffalo, N. Y., and Secretary of the Akron Oil Company, Akron, Ohio, his office headquarters being at 1031 Williamson Building, Cleveland, Ohio. Hukill has two children—fourteen and ten years old.

In F. C. Jaccard we have another member of the "Five and More Club," as he has six children—three boys and three girls—ranging in age from seventeen to three. Fred is mechanical superintendent for the Anaconda Copper Mining Company at Butte, Mont., his office being at 514 Hennessy Building in that city. —BRYANT NICHOLS, Secretary, 2 Rowe Street, Auburndale, Mass. HAROLD S. WONSON, Assistant Secretary, W. H. McElwain Company, Manchester, N. H.

'08

The second bi-monthly dinner of the 1927-28 season was held on Tuesday, January 10, at Walker Memorial. The following were present: Heath, Cookie, Coffin, Cary, Gerrish, Beede, Hunter, Kedy, Wells, Merrill, Cole, Mayo, Miss Babcock, Carter, Ames, Gurney, Medlicott. We were particularly fortunate in having Miss Babcock with us as it has been a long time since any of our coeds have been present at a class dinner.

After the dinner a good deal of time was given to discuss our coming Twentieth Reunion. The Reunion Committee, which consists of Burt Cary as Chairman, Ames, Cook, Davis, Toot Ellis, Sewall, and Gerrish, have been busy with preliminary details and Bert described in a general way what is planned. The Class will probably be located at West Bay Inn, Osterville, where we have been taken care of so well before, and it is hoped that most of the fellows can show up there in time for dinner Friday night, June 15. The Reunion will continue Saturday, June 16, Sunday, June 17, as well as Monday the eighteenth, which will, of course, be observed locally as a holiday.

We were represented at the Alumni Dinner at the Boston Chamber of Commerce Building on January 7 by Carter, Pope, and Wattles. —Edward B. Smith and Company, 1 Federal Street, Boston, members of the New York, Philadelphia, and Boston stock exchanges, announce that LeSeur T. Collins has become associated with their investment department. —Frank E. Mott, chemist of the Boston Health Department since 1908, was recently appointed by Mayor Nichols to the position of city milk inspector, a position formerly held by the late Professor James O. Jordan. Mr. Mott has the reputation of being the best milk expert of the United States.

We are again indebted to Professor Locke for information regarding Myers and Sweeny. D. B. Myers, who has been assistant geologist for the Union Oil Company of California for the last four years, was advanced on January 1 to the position of chief geologist. He has been located in Los Angeles practically all the time since his graduation. Harry P. Sweeny, having made a three-year contract with the Rhodesian Vanadium Corporation of America, left about the middle of January for Southern Rhodesia where he will have a responsible operating position. Sweeny has had a rather wide mining and business experience, having operated various coal mines and iron mines and more recently having been in charge of some of the public utilities of his home town, Stroudsburg, Penna. He reports that he has entirely recovered from a siege of ill health which he experienced a few years ago.

We are glad to report that the Class has another baby, as John Whitney Carter, Technology 1948, was born on December 18. —A wedding of unusual interest to aviation personnel took place at Greenwood, Va., on the evening of December 20. Captain G. C. Westervelt, CC, U. S. N. Retired, formerly Manager of the Naval Aircraft Factory, was married to Miss Reita Brabham Langhorne at the country estate of her mother. Captain Land was best man; Lieutenant Commander Oster and Lieutenant Barnaby were ushers. The bride and groom made a successful departure for New York, and will go to Miami, Fla., where Captain Westervelt is at present engaged in real estate development work.

We were very sorry to learn that W. B. Ford has, on account of poor health, been obliged temporarily to give up active business. His present address is Plymouth County Hospital, South Hanson, Mass., and he would be very pleased to receive letters from any of the fellows. If any of you happen to be in the vicinity, he would appreciate a visit very much. —HAROLD L. CARTER, Secretary, 185 Franklin Street, Boston, Mass.

'09

Carl Gram, who is with the Lancaster Iron Works in Lancaster, Penna., writes that he drove the family over to Pottstown recently to see D. K. Bullens and family, and reports that D. K., Jr., arrived some time last November. According to Carl, he is as fine a looking youngster as there is around. D. K. himself is probably so busy making magnets for radios that he hasn't had time to send in the official notice.

Carl also writes that he has just received a letter from Bill Kelly, who can now be reached at 4724 Chestnut Street, Philadelphia, Penna. Bill spends about half of his time traveling in the Middle West, and has recently seen Jack Moses and Bee Hutchinson in Detroit, and Bill Jenkins in Cleveland.

Channing Turner, who has been living near Chicago, has returned to Boston and is now associated with the Mason Regulator Company in Dorchester Center. —Austin Keables is teaching mill engineering and mathematics at the Lowell Textile School, where he is temporarily filling a vacancy which unexpectedly occurred in the faculty. —Tom Desmond and wife have just returned from a four-month trip abroad, having visited Norway, Sweden, Denmark, Spain, Portugal, and England.

From the Christopher Publishing House in Boston comes the announcement of a book on "Holidays" recently published by L. C. Eddy. The announcement states that "Mr. Eddy has given a fund of information in this book, comprehensive in its scope, and not to our knowledge obtainable in any one book. It will doubtless be a great surprise to many to learn that every day in the year has been a holiday at least once since history began." —L. R. Forrest is technical director of the Smet-Solvay Company, 61 Broadway, New York.

Word has just been received that A. B. Purdon died at Blackshear, Ga., during July, 1927. Purdon was a special student in Course II during the third and fourth years. —CHARLES R. MAIN, Secretary, 201 Devonshire Street, Boston, Mass. PAUL M. WISWALL, Assistant Secretary, Franklin Baker Building, Hoboken, N. J. MAURICE R. SCHARFF, Assistant Secretary, 435 Sixth Avenue, Pittsburgh, Penna.

'10

Carl Lovejoy comes through with his welcome annual letter: "Here comes my annual complaint about the scarcity of 1910 news in The Technology Review. As I don't have anything original to offer I am enclosing a couple of clippings I noticed lately concerning 1910 men. Incidentally, the book called 'Your Money's Worth' has the greatest call in the non-fiction class at the Toledo Public Library.

"Another matter of possible interest, taken from print too, is a list of 1910 men who are members of the American Society of Civil Engineers. If you wish to report it, they are as follows: J. G. Ahlers, J. B. Babcock, E. H. Barber, R. M. Gillis, M. C. Halsey, R. W. Horne, P. G. Laurson, Lasley Lee, John Lodge, C. H. Lovejoy, A. B. Merry, G. L. Mylchreest, F. J. Pitcher, R. A. Smead, Hale Sutherland, R. G. Tyler, J. P. Wentworth.

"I notice the January Review gives K. D. Fernstrom with a Technology room number address as one of the Assistant Secretaries of

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the Class. Why not a little announcement? Is he now a part of the Faculty? Seems like it might be good business for a professor to write some notes. It won't be long now until some of us have sons there; in fact, if I remember right, I believe Spencer B. Lane has, or did have, a boy there last year.

"I don't call this a live personal letter but rather statistical. I wish you fellows in Boston would write sometimes. I drove on to Boston last summer and went through the new Technology for the first time. I spent a pleasant afternoon with Professor Jack Babcock."

The following was taken from the *Engineering News-Record* for December 29, 1927: "J. G. Tripp, until recently engineer of construction on the Lake Pleasant Dam, has taken charge of the construction work on the Coolidge Dam for Atkinson Kier Brothers Spicer Company, the general contractors. Mr. Tripp is a graduate of the Massachusetts Institute of Technology and has had varied experiences on dam construction, having been employed on the Little Rock Dam at Palm-dale, Calif., and the Emigrant Creek Dam at Ashland, Ore."—DUDLEY CLAPP, *Secretary*, 16 Martin Street, Cambridge, Mass. R. O. FERNANDEZ, *Assistant Secretary*, 435 Sixth Avenue, Pittsburgh, Penna.

'11 Such a dearth of 1911 news as there is at the present time! However, I am just starting (January 24) on a month's trip to local Alumni Clubs in the South and lower Middle West and I hope to see and talk with a lot of Eleveners en route.

I just took a trip to four of the upper New York State Clubs and had some delightful renewals of acquaintance. At a dinner meeting in Syracuse I was delighted to find that Howard Ireland, XI, and O. D. Powell, XI, had driven over from Auburn, where they are both in shoe manufacturing, to greet me. We had a fine chat and they told me that R. W. Bierer, I, also with Dunn and McCarthy at Auburn, had hoped to come, but at the last minute found he couldn't. I had hoped to see Cap Besse, II, wipe the chocolate dripping off his hands and come over from Fulton, but he didn't.

There were no 1911 men at Utica, but at Schenectady I saw good old jovial Otto Schurig, VI, a General Electric mandatar. Much to my regret I found that Harry Tisdale, V, was out of town on a business trip. Joe Harrington, the now famous Course VI chemical engineer, came over from Albany and drove me there from Schenectady, where I spent the night with him and his wife. Joe is now Vice-President and General Manager of the Industrial Solvents Company in the Capitol City of the Empire State.

While I was on that trip I received a call from Rudie Pray, V, who was up from N'Orleans on business. However, that southern city is on my present itinerary, so I hope he'll be back home by the time I reach there. And, by the way, this trip will start off with a bang for I'm to be the house guest of Don Frazier, II, and his fine wife during a twenty-four hour-stay in Richmond.

We had a good 1911 representation at the Annual Dinner of the Alumni Association at the Boston Chamber of Commerce on January 7. As usual, Ye Scribe was at the head table leading the vocal efforts, but I found

time to get down to the 1911 table and greet the following classmates: William H. Coburn, I, XI; Eugene A. Coupal, II; George B. Cumings, VI; C. P. Eldred, VI; Arthur F. Leary, XI; M. J. Lowenberg, VI; Roy G. MacPherson, II; C. A. McManus, I; O. W. Stewart, I; E. D. Van Tassel, Jr., X.

I recently had nice letter from Dippy Allen, VI, who is now in Meriden, Conn., enclosing a pledge for the Alumni Dormitory Fund. These pledges aren't coming in very fast, boys, and we ought to have an average of about \$25.00 a man spread over two or not more than three years. It's a great cause!

There you are, Mates, that represents the news for this month. Do you wonder I call attention to the dearth? You know the answer—write to Dennie! In closing I have a short message for you Eleveners regarding my resignation as Alumni Secretary, effective June 30, 1928, as reported in the February Review. It was with sincere regret that I reached the decision that in justice to my family I must reënter the world of active business, but then, as now, I shall endeavor to give of my best as Secretary of the Class of 1911.—ORVILLE B. DENISON, *Secretary*, Room 3-207, M. I. T., Cambridge, Mass. JOHN A. HERLIHY, *Assistant Secretary*, 588 Riverside Avenue, Medford, Mass.

'12 For several months now, we've been doing a little heavy hitting in the Class Notes League. Only one month, December, we got caught with our foot off the base when the issue went to press. Have you been reading them? Do you like them? Whether you like 'em or not, why not write a letter to Shep or Mac and tell us what you think. We welcome brickbats or bouquets—anything is welcome in place of the abysmal stillness, the clam-like silence which emanates from our classmates. We feel just a little bit hurt and discouraged when some classmates haven't the interest or even the courtesy to answer a friendly personal letter, or at least acknowledge it.

However, we do get some coöperation, for which we are duly grateful. Last month we made first base with a little sketch in which we starred Earl E. Ferry, VI. This month we claim another safe hit with his brother, Ralph, in the feature rôle.

Ralph M. Ferry, II, picked the aluminum business as a winner way back in 1912, when he took a sales apprentice job with the Aluminum Company of America. He's been with that company, or its affiliated organizations ever since, and has found that it pays to stick. Ralph now has a fine job as superintendent of manufacturing divisions at their Edgewater plant, New Jersey. He is also one of the dependable stand-bys of the New York group of 1912 men and has loyally supported, with his time and money, everything they have undertaken. The history of Ralph's progress with the Aluminum Company is one of consistent effort with its rewards of advancement and increasing responsibility.

He started at the fabricating plant in New Kensington, Penna., on August 1, 1912. After being at the mill nine months he was transferred to the General Sales Office in Pittsburgh, and after a couple of months there, was sent back to the factory at New

Kensington to be the Sales Department's representative on some experimental work. By the fall of 1913 this experimental work had proved successful and as a result a new department was organized. The superintendent of the New Kensington Works, also a Technology graduate, made him foreman of the new department, changing him from a sales career to the operating end, which he has since followed. Before long Ralph was made Assistant General Foreman of the Cooking Utensil Manufacturing Department, which at that time employed about 1,200 men. He was on this job approximately a year when in the fall of 1916 he was transferred to the Toronto works as superintendent of the plant, operating a foundry, rolling mill, and cooking utensil department. He was located in Toronto for six years, during which time they built a ten-story, reinforced concrete building. He went through what probably lots of other classmates have gone through, namely, the hectic conditions of trying to keep a plant operating and watch a lot of new construction at the same time. One of the incidents which he still recalls most vividly was a fire that opened up several sprinklers and soaked a 2,200-volt a-c motor while it was running. The motor blew up and they had three days and three nights of continuous work repairing and drying out this unit, after which his plans for a good hot bath and long sleep were upset by a female delegation at his boarding house objecting to the noise of his 4 A.M. bath.

On January 1, 1923, he was transferred to the United States at the Edgewater plant. As superintendent of the manufacturing divisions at this plant, his supervision covers a rolling mill for aluminum sheet, a collapsible tube department for toothpaste and shaving cream tubes, a rivet department for aluminum rivets, and a foil department for rolling aluminum foil. About a thousand employees are involved in these operations. Ralph M. Ferry's business address is United States Aluminum Company, Edgewater, N. J., and his home is in Tenafly, N. J.

"Farewell to William C. Bird." That sounds like taps or a requiem for old Bill Bird, I, but we rise to assure you that's one bird who is far from dead. The house-organ of the Rockland and Rockport Lime Corporation, dated January 1, 1928, carried a two-page leader with the above dirge-like title, announcing that Bird was leaving their organization to go with Bond and Goodwin, Inc., investment brokers in New York. Bird has been with the Rockland and Rockport Lime Corporation at Rockland, Maine, since 1920. That city, incidentally, is Bird's own home town. He has had supervision over the operation of quarries and the construction of crusher plants. He has been Vice-President and acting General Manager for the past two years, and only an advantageous proposition and greater opportunities ahead induced him to leave there and take up the battle in New York. Bill has achieved something of a reputation as an angler and a hunter in the deepest forests of the Pine Tree State. Until he chooses a suitable permanent residence in or around the Metropolis, William C. Bird can be addressed care of Bond and Goodwin, Inc., 31 Pine Street, New York.

William T. Baxter, III, we hear, is now in Norway where his company, the Nitrogen

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Fixation Corporation, has some important work under way.

One of our classmates in Course II bursts into the A. S. M. E. *News* as follows: "Captain H. C. Mabbott, who was formerly located at Fort Monroe, Va., has been transferred to Fort H. G. Wright. The present address of Captain Mabbott is 8 Fountain Terrace, Cambridge, Mass." Captain Mabbott has been taking advanced courses at Technology in radio engineering during the past few months.

Marcel Desloge, IV, seems to think we are a trifle cuckoo to start talking about a reunion in 1932 at this early date. He says in part: "As one of the thirty odd men who showed up for the Tenth Reunion I endorse the Twentieth Reunion idea. It is a little far ahead to get excited about, however." We admit, Marcel, that the excitement isn't very tense, as yet, but as John Paul Jones so aptly phrased it, "We've just begun to excite." Desloge writes that he is planning a trip of several months abroad, during which time he is to make an exhaustive study of the architecture of Europe, Asia and Africa. We hope to have an interesting letter from him for this column, at some not too distant date.

May we again offer the gentle hint that a few odd contributions of one dollar in current coin of the realm would help to make it possible to keep this Class of ours going. We don't spend much, but there are some expenses, and you can't expect Shep and Mac to foot them all.

A photograph of Johnnie Glaze, XIV, appears in the current issue of the *Norton Spirit* as being one of the twenty members of the Ten-Year Club of the Norton Company. John is located at the Niagara Plant and from his photograph seems to have taken on about forty pounds in weight.

At the Annual Alumni Dinner, held at the Boston Chamber of Commerce on January 7, the following 1912 men were present: Max Mason, VI; Elliot Tarr, VI; Reynolds, XI; Lang, X; Shepard, VI. We hope to get out a larger crowd for next year. — FREDERICK J. SHEPARD, JR., *Secretary*, 125 Walnut Street, Watertown, Mass. D. J. McGRATH, *Assistant Secretary*, McGraw-Hill Company, 10th Avenue and 36th Street, New York, N. Y.

'13 The worm has turned. For many issues of *The Technology Review*, 1913 has not shown anything of interest, or even had any notes. Your Honorable Secretary, Hap Peck, has been so busy with his patent law cases that he has been unable to furnish *The Review* with proper notes. Your Assistant Secretary has come to life and will endeavor to put your Class back on the map.

The Annual Alumni Banquet was held Saturday evening, January 7, 1928, at the Boston Chamber of Commerce. We had a very spare but select representation, consisting of Warren E. Glancy, Austin K. Wardwell, William A. Bryant (Butsey), A. L. Brown, Charles Thompson, and your Assistant Secretary, George P. Capen (Phil). We all had a very pleasant and enjoyable evening, although Butsey has had most of his teeth removed and really didn't get his money's worth.

Do you realize that we've been out of the Institute for nearly fifteen years? Do you

realize that next June we shall have the best Fifteenth Reunion ever? Make your plans now to sojourn somewhere, some place on the Cape, glorious old Cape Cod, June 15, 16, 17, and possibly June 18.

Several of your classmates met on January 18 at the Walker Memorial and enjoyed a bountiful repast and arranged a temporary Fifteenth Reunion Committee of the Class of 1913. The following were present: Frank Mahoney (Jumbo), Walter Muther, Jerry Fallon, Stan Parker, Ike Eichorn, Joe McKinnon, Charlie Thompson, Al Townsend, and Phil Capen. Reunion plans were discussed at length and it was decided to hold our Fifteenth Reunion on the Cape. The following temporary officers and committees were appointed: Phil Capen, Chairman; Joe McKinnon, Treasurer. Publicity Committee: Al Townsend and Phil Capen. Playground or Housing Committee: Charlie Thompson and Jerry Fallon. Entertainment Committee: Frank Mahoney, Ike Eichorn, Jerry Fallon, Walt Muther, and Stan Parker.

There will have been a Reunion Committee dinner and meeting on February 15 at Walker Memorial. All members of the Class of 1913 were notified to be present who are located in or about Boston (even from Providence). Definite plans and organization will be formulated. Come one, come all. We shall endeavor to have the biggest and best Fifteenth Reunion that has ever been perpetrated at the Institute. Make your plans accordingly and let us know that you'll be with us in June.

Hap Peck is now commuting between Providence and Kansas City. — Bill Brewster is making weekly trips to New York. — Bill Mattson, so we understand, is now spending his afternoons addressing various women's clubs. He was ever a Sheik. — Mac McLellan is visiting in Jamaica, B. W. I. — Ken Hamilton is with the George E. Keith Company and his articles on factory management are a great help to the rest of the world. — Phil Terry has joined forces with A. H. Spaulding in Spaulding-Moss Company, Boston.

Stan Parker can still keep a Log (Tenth Reunion). — Ted Atwater has left Boston and is located at the Buhl Building, Detroit, Mich. — Joe McKinnon, the Registrar of the Institute, and Al Townsend (Professor) expect to run the 1928 summer school. — G. R. Pardey is leaving the confines of the Codfish State. (What do you think of the Massachusetts license plate, is it a codfish or isn't it?) Pardey expects to move to New York in the spring to show the gang down there how the Westinghouse Electric Company should be managed.

Dave Nason is still the real globe trotter of the Class and has informed us that he will be at the Reunion, when, where, and how it is decided. — Phil Burt is endeavoring to show Mr. Babson how many calories can be served and still keep your girlish figure. Yes! and he's getting away with it. — Jim Russell is showing the powers that be at the Institute several ingenious ideas of his own.

Fred Murdock is down in the wilds of South Carolina — Greenville — as President of the Southern Weaving Company. Yours truly received a letter last spring from Fred asking for information which was duly furnished. Since that time Fred may have used this valuable information, but the writer is still in the dark. — Eddie Germain, the

President of the Dunlop Tire Company, must have forgotten his old classmates as we never hear from him.

Remember the dates June 15, 16, 17, and 18, somewhere, some place on the Cape. Get away from your daily routine and remember those good old days "dressed in your dinky uniform, and so on." Renew old friendships. Leave your wives and sweethearts behind and bask in the sunshine and return to the Hub of the Nation.

We cannot give you up-to-date news unless you let us hear of your accomplishments, your families, and your ideals. Lest we forget, class dues are now due and payable in advance — \$1.00 per annum. Make checks payable to Joseph C. McKinnon, Registrar, M. I. T. The classmates present on January 18 have agreed to underwrite the Fifteenth Reunion. Will you do your part? Watch our smoke.

Much delayed announcement is made of the arrival of Ruth Bryant on October 6, 1927, at the home of Mr. and Mrs. William A. Bryant in Brookline.

Larry Hart, after fourteen years of service with the Johns-Manville Company, has left that organization to become an officer and director of the Riess Manufacturing Company, of Kokomo, Ind. This concern manufactures equipment for brake service stations. Larry's new address is 315 South Union Street, Kokomo, Ind. In Larry's letter announcing this change he asked to be remembered to all members of the Class, and particularly requests that any '13-ers traveling through Kokomo drop off and see him. — HARRY D. PECK, *Secretary*, 1123 Hospital Trust Building, Providence, R. I. G. P. CAPEN, *Assistant Secretary*, 25 Beaumont Street, Canton, Mass.

'14 When Eric F. Hodgins, '22, Editor, Scholar, and Gentleman, resigned as Managing Editor of *The Review* last

June to edit that great American household publication, *The Youth's Companion*, little did your Secretary realize how much it meant to him. Not only did Eric see that the 1914 Notes were published in full, but he allowed your Secretary to contract for his personal use seventy-five per cent of *The Review* back covers — and — and following one 1914 dinner even offered the front cover, but later repudiated the contract. The gilded tongue of the new Managing Editor, Jim Killian, enchanted your Secretary until the January Review appeared. After reading page 167 your Secretary humbly apologizes to the Class for his own existence, and henceforth promises to treat all editors in a manner due their kind.

Perhaps ashamed to be seen in his company after reading the January Review, only three Fourteeners joined your Secretary at the Annual Alumni Dinner on January 7. The forgiving, yet still trusting, were Dean Fales, Carl Berry, and Malc Mackenzie. We four in due solemnity did our best to do credit to our fellow classmates. A fine dinner, distinguished guests, and some speaking. 'Tis unfortunate that so few of our number saw fit to attend.

The January 7 Boston *News Bureau* in its brief and carefully selected news column included the following regarding our renowned

1914 Continued

clansman, Porter Adams: "Practicability of regular transatlantic commercial flying may be tested out this year by National Aeronautic Association under proposal laid before board of governors by President Adams. Plan calls for three round trips across Atlantic by same machine and with same pilots. Adams suggested raising fund of \$100,000 to finance tests and offered first \$1,000 out of his own pocket."

From time to time there have been recorded in this column new patents issued to Warren Horton of the Bell Telephone Laboratories. Horton is also becoming a much-sought-for speaker on technical subjects. On January 11 he addressed the Boston section of the A. I. E. E. on "Television." The announcement introduced Horton as follows: "Mr. Horton, as a member of the research staff of the Laboratories, made a large contribution to television in the design of the necessary circuits. His knowledge of his subject and its successful presentation is attested by the many sections before which he has presented it."

Deeply absorbed in "Your Money's Worth" as the miles slid away from Boston to New York, a tap on the shoulder startled your Secretary. Standing there was none other than our former Secretary, Callahan. Cal was just returning from a visit to his former home in Lawrence. He wore, as always, his expansive smile, but he was as reticent and bashful as ever. Engineering appraisals have so occupied Cal's life that there has been no time for other things—and Cal is still a bachelor.

Giving more than usual attention to each car on exhibit as he passed from booth to booth at the New York Auto Show, his very thoroughness attracted your Secretary's attention. He looked familiar. Yes! It was none other than F. E. Waters who had been sent to the show by the New England Tel. and Tel. Co. to study the best types of cars for its service. — H. B. RICHMOND, *Secretary*, 100 Gray Street, Arlington, Mass. G. K. PERLEY, *Assistant Secretary*, 21 Vista Way, Port Washington, Long Island, N. Y.

'15 No notes have been received by The Review Editors from the Secretary of this Class for inclusion in the March issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to AZEL W. MACK, *Secretary*, 377 Marlboro Street, Boston, Mass.

'16 At last we have some actual letters from a few members, some of them unheard of for years and years. All of them are from outside New England; possibly they read in a recent issue of The Review the remarks about the 1916 man who took the door bell batteries with him when he moved, and are establishing alibis by announcing their residence in other parts of the country.

Ken Dean turns up in Houston, Texas, and writes as follows: "I suppose every one knows I married a Houston girl in 1922 and have one daughter, aged three. I have been here in Houston ever since the war and

associated with Sanders and Company, Inc., since 1920. As you know, Houston is a mighty nice town in which to live and the development that has taken place here within the past ten years reads more like a fairy story than actual facts. There are very few Technology men here and consequently I see only those who, like myself, live here. Of course I have been East off and on to see my folks, but unfortunately have not been able to arrange my trips to coincide with reunions, although I shall not let another get by me."

"Do you remember John Staub, '15? He lives here now with his family, consisting of a wife and two children, and is a practicing architect. I had him design and supervise the building of my home in River-Oaks two years ago, and we are very much pleased with it. In my opinion he does the nicest work in this part of the country. As for sports, I indulge rather frequently in golf, occasionally in tennis and gardening, and am an onlooker very often at the polo and ice hockey games we have here. I think these local teams are very adept in their particular lines, especially the polo aggregation."

Flip Fleming, in Akron with the Goodyear Tire and Rubber Company, also helps out with: "I am married and have two children, a boy of nine and a girl of six. They are both in school at present. I am living in Kenmore, just outside of Akron, but have started construction on a home in Akron, which should be completed around April 1. Mr. Dunn, a graduate of Technology, I believe in either the Class of '14 or '15, is the architect on the job. He has his office in Cleveland. The home is not so pretentious, but is making quite a hole in my pocketbook, and we believe will be very nice when it is finished. I am still working for the Goodyear Tire and Rubber Company, Akron. I have recently been promoted, and am now in charge at Plant II as superintendent of production. Plant II is made up of three distinct divisions—tires, reclaiming, and mechanical goods. We employ from 4,500 to 6,000 people. I have been making pretty good progress at Goodyear and hope to continue to do so."

From Paul Duff we have a history in outline form: "Resigned as Captain C. A. C., 1920; now Major, Medical Reserve. M.D., Harvard 1923; Post-Graduate work at Mayo Clinic, Boston City Hospital, Carney Hospital. Married, 1925, to Miss Frances E. Fitzgerald of Peabody, Mass. One child, Paul Harrington, Jr. Doing surgery in Dallas. Like Texas fine."

George Ousler writes: "Since leaving the Institute I have been connected with the Philadelphia Company, the holding company for all the public utilities in the Pittsburgh district, which includes two counties, covering 1,000 square miles of territory. These public utilities control the electric service, gas service, and street railways service in the territory. About a year and a half ago the Byllesby Engineering and Management Company, one of the largest holding companies in the United States, got control of the Philadelphia Company and we are now part of that group. During the last eleven years with this company I have worked in various phases of the utility game, all the way from construction of power plants to engineering and design of various stations. At the present time I am in the general sales

department of the Philadelphia Company, a department consisting of about 360 men, and I have charge of one of the divisions of this department consisting of about sixty-five men. My particular division attempts to take care of sales engineering work and we have charge of negotiations with customers and designs of industrial substations for these customers in connection with service to them from the Duquesne Light Company system. These stations vary in size from domestic consumers to industrial customers of 20,000 kw. capacity. It may seem rather strange to you that engineering work of this nature is in the sales department, but the connection is close and it works very well in helping the salesmen to negotiate contracts and get service to the customers as quickly as possible.

"As for my family, I am still in the single state and have not taken on that liability as yet. Of course, one never knows when such a step may be taken. So far as Institute activities are concerned, I am, at the present time, President of our local alumni group, and if I do say it myself, I think we have one of the most active groups in the country. We have about 350 men in the territory and I think our meetings are very well attended. As you probably know, we were instrumental in getting the Technology Clubs Associated to have their next business meeting in Pittsburgh in 1929. So far as my travels are concerned, I have confined them to the United States and, of course, in the last few years, in connection with the business of our company, I have been over the greater portion of the eastern and southern part of the country. Every time I am in New York I make it a point to get in touch with some of our Class if at all possible, and have often seen Bill Knieszner. This is a rather rambling letter, and I do not know whether you will get much out of it, but you can pick out the high spots and put as much in The Review as you see fit."

From Howard Foster comes the following comment: "Wake up, old top. Am glad to note that you have finally hit upon a method of distilling dope from Sixteeners. I believe that you could gather quite a bit of information by having some forms printed showing the type of information you desire and sending out about ten of these blanks a month to be filled out and returned to you. Easier for you and easier for us. I don't think I ever reported the third addition to the family, who is a girl, now somewhere around two years old. A wife and three children being the average family in these United States, I am well content to let matters rest."

"I am now interested in several lines of work ranging from real estate to domestic refrigeration, mechanical devices, and drilling and operating for the production of oil. Being from Texas you are probably familiar with the oil game and know that Michigan is considered promising oil territory. Development work is going ahead quietly and I am among those present, having organized an oil company which now has about 10,000 acres of leases and have drilled two wildcats, both of which struck oil, and am now drilling a deep test, down 4,000 feet at present, which is showing signs of becoming a real oil well. Be sure and look me up whenever you are in Detroit."

1916 Continued

Tred Hine and Milton Pettibone are engaged in making the Detroit skyline look like lower Manhattan. They are both architects with Smith Hinchman and Grylls, who are doing the new Penobscott Building, a forty-six-story structure gracing down-town Detroit. Fred promised us some interesting information regarding the building, but so far it hasn't appeared. Phil Baker, also in Detroit, has been selected President of the local Technology Club.

Christmas cards from various Sixteeners provided some information. From Charlie Lawrence's card we gleaned the details of his family, three boys aged eight, seven and three. OB Pyle, who has been among the missing, sent us a card from Baltimore. Duke Wellington is still in New Haven, and Charlie McCarthy in Flushing, N. Y. I. B. McDaniel, when he retires from the Navy, can, if he wishes, do even better in the greeting card business, for about the most attractive card we saw this year was one he had evidently designed himself. We are looking forward to the time when the Navy stations him in more accessible ports; for the time being he seems to be near Seattle. — RUSSELL H. WHITE, *Secretary*, Kardex-Rand Sales Corp., 118 Federal Street, Boston, Mass. CHARLES W. LOOMIS, *Assistant Secretary*, 7338 Woodward Avenue, Detroit, Mich.

'17 The Annual Alumni Dinners are improving. This year there were two Seventeen men at the head table, hydra-titled Lobdell and Albert Hegenberger, the Army's only avigator, who treated the Pacific like a mill pond some months back. Cheers and applause greeted Lobdell when President Stratton credited him with invaluable services as Assistant Dean during recent months and an ovation drowned out a Seventeen shriek when Heggie was introduced. Heggie spoke briefly while Lobby rested on his laurels. Out of town guests included Phil Hulburd, Jim Doon (very much out of town), Bob Erb, Dex Tutein, and others.

Class funds are now overdrawn with the worthy Treasurer holding the worse-than-empty bag. If he can borrow or steal enough money for a circular letter, you may soon get that long postponed notice for dues. Even Dr. Allan Winter Rowe had to send a second request, and if you have read or heard one of Doc Rowe's appeals for athletic funds, you know that our Treasurer must be in a bad way financially.

Bill Gray dropped in and told of meeting Technology men in New Orleans, Los Angeles, San Francisco, Chicago, New York, and way stations. In Tulsa, he found Dick Lyons, head of the Land Department of the Skelly Oil Company; J. D. McManus is chief engineer of Bill Walworth Company's Greensburg, Penna., factory.

Here's a good letter from Jim Spaulding. Did it ever occur to you that you might send in a similar note yourself? Spaulding is Treasurer of the Spaulding Construction Company, Inc., of 125 East 46th Street, New York.

"It's about time the Class of '17 acknowledged a new arrival. My one and only son, born July 10, is progressing very nicely, and I think is headed straight for M. I. T., where he should land a few years from now.

"About a month before that event, I enjoyed the Class Reunion a great deal. I had not seen any of the members of the Class since I left Technology in '14, and it was a pleasure as well as a lot of fun. Being disappointed in not seeing Art Keating, and having a half hour at Stamford to change trains on my way home, I called him up, only to discover that the double pressure of business and family responsibility had kept him away.

"I am in business with my brother, who was in the Class of '09, after about thirteen years of varied work in Honolulu, San Francisco, and Florida. I want to congratulate the Class, not to forget Mac, in the arrangements for the Reunion. Not the least surprising was to find that Brick Dunham could divide expenses and make it such a reasonable party. I don't know how he does it, but I know that I would want the new thinking machine to help me out." — RAYMOND S. STEVENS, *Secretary*, 30 Charles River Road, Cambridge, Mass.

'18 The New Year has come and gone, but I am sorry to say that it does not seem to have made any impression on the Class of 1918 in reference to sending notes in for The Review. Please, Fellow Classmates, send me in some news or I will be all run out before many more months are past.

The first Saturday in the New Year brought around the Alumni Dinner in Boston. It was rather discouraging when I saw Dennie before the dinner to have him tell me that only seven of our Class had registered their intentions of being present, and our rival Class of 1917 was registered with seventeen. All this after sending out cards from this office to sixty of the fellows. I am glad to say, though, that when the time came for us to sit down to eat, an extension in the form of a small serving table had to be added to the table for the Class of '18, as we really had eleven there in all. Those present at this time were Julie Howe, Ralph Whitcomb, Joe Kelley, George McLaughlin, Albert Sawyer, John Kiley, Carlton Tucker, Fred Philbrick, Grennie Hancock, Shorty Carr, and your Secretary. Some of the old standbys were missing, but, we hope, not because they did not want our company.

Your Secretary called a meeting of the few that arrived a little early for the dinner to talk over the Reunion a little, and we here in Boston are now in accord with New York that the best place for us to get together would be down along the coast of Rhode Island or Connecticut, part way between New York and Boston. Then it would be an easy run for any of the fellows who come from a distance to get to either one or the other of the cities easily if they wished to renew old acquaintances and familiar haunts of by-gone days. Plans for the Reunion will be in the making very shortly now as a committee is beginning to get to work.

Another thing that was mentioned was the Dormitory Fund. In looking over the list we are way down and it is up to you fellows to send in either your donation or your pledge so that we can go up a little on this list. I confess that we are not down at the very bottom, but we will be very soon if we do not get started.

At last a letter has been received from our

Class President, Bob VanKirk. It reads as follows: "I have postponed answering your letter so long that I have no excuse to offer other than procrastination, so I will not attempt to make one. I appreciate the thankless job you have been willing to undertake of editing the Class Notes for The Review. What you said in the recent columns is true. It seems that we all have a lot of inertia to overcome before we can get around to writing a letter about ourselves. . . . I am in the same place as I have been for the last four years, duPont Company, Dyestuffs Sales Department, Chicago Office, at 1114 Union Trust Building. My work is sales and demonstration and I am away from Chicago a good deal, covering mills in Wisconsin, Minnesota, Michigan, and Indiana. I am living in Evanston. My family consists of wife and a daughter, fifteen months old. They say the daughter looks like me, but she will probably outgrow that.

"I very seldom see any 1918 men. There are several here, but Chicago is so big that our paths seldom cross. Last August Jack Poteat, VI, left Lockwood, Greene Company to go with the Edison Electric Appliance Company, a change from engineering to manufacturing. He is living in Geneva, Ill., which is one of our suburbs thirty miles west, but his work is in Chicago at one of the Hot-Point plants. Jack Braislin was transferred back to the New York office of the Fireman's Fund Insurance Company in October. At the same time he was married to Miss Elizabeth Cook of Evanston, Ill., making one less bachelor in the class ranks. [Congratulations from the Class, Jack! — Sec.] Doug Buchanan is still in the Patent Office at Washington, but he has had several attractive offers of late and he may not work for the United States much longer. He is still single.

"I heard indirectly that Phil Dinkins is now Vice-President and General Sales Manager for the Kalbfleisch Corporation. This is a big job and we will all have to step on the gas to even see that boy's dust. Congratulations, Phil. [Yes, congratulations from the whole Class, not just from the President.]

"These are all the boys I have any news of at present. I hope all the fellows will follow my belated example and send a letter about themselves and those they have seen. Then the 1918 columns of The Review will certainly fill all our space with exceedingly interesting reading matter."

Your Secretary wishes that all the fellows would read a second time this last paragraph of Bob's letter and abide by it. Material is getting rather low, and I may have to make up stories in the next few months if I do not hear from some of you soon.

One more thing about the Reunion. It is now the general opinion that this Tenth Reunion should not be a stag party. New York was strong for the wives to be along, and now even Boston, or the group, or rather I should say, most of the group at the Alumni Dinner feel the same way about it. A few that really want to have a week-end booze party can go off by themselves and have it, but it does not seem to be the general feeling of the majority that that is what the Reunion should be. Your Secretary is not voicing her opinion alone on this subject.

1918 Continued

Word comes through the Alumni Office that one of our Class is now working hard to be a lawyer. We have turned in many directions, but I think this is the first time one of our ranks has turned toward the legal profession. Abraham Jepsky is now in the Class of 1931 at Northeastern. Go to it, Classmate, if that is what you want after a scientific education.

Now for the final plea for news and also to see if any one has a "little fairy or elf" in his home, born prior to November, 1919. As things stand now Maggie Magoun's daughter is the oldest in our group of the second generation. — GRETCHEN A. PALMER, Secretary, 148 State Street, Boston, Mass.

'19 A few notes of interest regarding 1919 men have accumulated during the past three months in spite of the lack of correspondence on your and my part. My only alibi is my absence in Vermont endeavoring to assist in the rebuilding of dams and bridges washed out by the flood of November.

We are glad to announce that Bob Bolan is very much interested in Technology affairs and its future welfare as well as class affairs. The second Bolan, Richard Stuart, a promising Technology '46-er appeared December 11 at Swampscott. Bob writes: "Please note change in address to 72 Magnolia Road, Swampscott. We have recently purchased the door-knob on this outfit and hope to own the rest of it some day by the 'dollar down, dollar a week' method. I was talking with Max Knobel the other day and he felt keen for a little Class of 1919 bridge. Why not? We could start in slow and easy by having a few meet at the University Club or Walker two evenings a month and later build up possibly to a big party. Perhaps a mixed party might net a little mazuma for our noble Tenth Reunion. Think it over and if you believe it would become successful let's give it a try. Best regards, Bob."

Malcolm McKinley, now assistant to the manager of the Lowell Electric Company, tells me that he stepped out last fall and has decided that he much prefers home cooking with a nice little wife. Fred Flather was married to Miss Lillian E. Charles in New York, October 24. According to the Boston *Globe* they will live in Lowell where Flather is endeavoring to hold down a bank position and many family traditions. Harold Pratt and Miss Barbara Hammond were married in Clinton, October 11. Pratt is in the hardware business with his father in Clinton. O. B. Denison, '11, has suggested that '19 men get together on Tuesday at the University Club for luncheons at the Technology table. I think his suggestion is good, so let's plan on meeting old friends there at 12:30, Tuesdays, whenever we can. It is time that plans were being made for our Tenth Reunion next year and suggestions for carrying out a big reunion would be more than welcome, along with your class dues of \$3.00 now due for this year and last year combined. Our treasury has accumulated enough to start the ball rolling for an interesting reunion, but we need now to make definite arrangements and plans.

Paul Sheeline, Waldo Clark, Roger Leland, Russ Palmer, Ben Bristol, Bob Bolan,

Marshall Lee and Dan Lundquist were out for the Alumni Dinner in January when the usual program of eats, songs, and speeches were passed out. — PAUL F. SWASEY, Secretary, 99 Washington Street, East Milton, Mass.

'20 The following members of the Class exhibited pep enough to attend the Annual Dinner of the Alumni Association held at the Chamber of Commerce Building January 7: W. B. West, H. C. Pierce, Foster P. Doane, E. W. Freeman, A. A. Fraser, J. D. Mitsch, H. W. Reinhard, E. R. Perkins, and H. C. Haskell.

Benjamin West took the trouble to look me up on the day of the dinner and I had a pleasant chat with him. He is still with the Brooklyn Edison Company. — I received an exceedingly interesting Christmas card from Henry R. Murphy from Beirut, Syria, which contained a snapshot of him clothed in true Arabian fashion. If it wasn't for the horned-rim glasses you would take him for a sure enough sheik. Bunt is undoubtedly doing a real man's job down there with the Near East Relief, but he is so modest that it is hard to get him to tell any of his doings, strange and interesting though they may be.

Your Secretary has moved to the Statler Building and will be found there at Room 932. This should be a convenient point of contact for any classmates who are from out of town, as they are likely to stop at Boston's newest and largest hotel, and can come up to my office without putting on a hat or coat. — HAROLD BUGBEE, Secretary, 9 Chandler Road, West Medford, Mass.

'21 We can't help quoting in full the message on the back of a Christmas card, the front of which shows off to good advantage a sumptuous Pasadena mansion and conveys a cheery message from Marge and Jack Kendall — here's the message: "You must find it cheaper to move than to pay rent! Each Christmas finds you elsewhere. Haven't seen many '21 men out this way lately; I guess engineering jobs are too scarce. We need more industry here. Firestone, Goodyear, and Ford are the only ones that have seen the possibilities. Better bring Victor out here. No babies yet!" Jack's address is P. O. Box 599, Pasadena, Calif.

M. K. Burckett, VI, claims to be our (Note for Ray: He says this means you, too — Cac.) creditor to the extent of three letters. At least we evened up on the Christmas greetings! Max, who lives at 3205 Gilbert Avenue, W. H., Cincinnati, Ohio, has been located there for the past three years, married for two years and has been production manager of the Ralph H. Jones Company for almost two years.

From 62 Wildwood Street, Winchester, Mass., comes a short note from Connie, or if we must be formal, Mrs. M. B. Lees, but, as is usual with Course IV folk, modesty is the predominant motif and there is nothing further to chronicle here.

H. F. Stose, XIV, 31 Kimball Road, Watertown, Mass., dropped in to see us and we had an old-fashioned bull session during lunch at the Philly Engineers' Club with J. P. Maxfield, '10, F. L. Hunt, '09, and C. W. Stose,

'22. Stiegler is doing research in chemical engineering with the Hood Rubber Company. He was married last year and did his best to convert us from the ways of crusty bachelorhood with a paternal lecture on the subject.

We apologize for acknowledging a fine letter from H. P. Field, VI, 2048 Nuuanu Avenue, Honolulu, Hawaii, at this late date. Since leaving Richmond, Va., where he was with the General Electric Company, Harry has, for the last year and a half, been with the Hawaiian Electric Company, Ltd., selling kilowatts. He reports experiencing difficulties with a surf board at Waikiki due, thinks he, to a neglect of work in Hydraulics. That was a "Riddell" to us, too! We wonder if Harry can imitate four Hawaiians. Best wishes to your wife and H. P., Jr., too.

Two other visitors to Camden were F. W. Adams, X, and J. G. Kaufman, X. Freddie, or rather Professor Frederick, told us about some clever engineering stunts developed by the personnel of the School of Chemical Engineering Practice. He is at the Bangor, Maine, station and is living at 269 French Street. Joe Kaufman is insulation engineer for L. Sonneborn Sons, Inc., 114 Fifth Avenue New York, and gave us an interesting story on paints and varnishes used for insulation purposes in the electrical trade.

Belated, but no less sincere, are our congratulations to Hartwell Flemming, VI. "Mr. and Mrs. Otto H. Wielan announce the marriage of their daughter, Gertrude Ida, to Mr. Hartwell Flemming on Thursday, October 20, at Providence, R. I." Harty is now living at 6721 McPherson Boulevard, Pittsburgh, Penna.

On December 2, Melissa Lord arrived at the home of G. Frank Lord, XV. — Last August Miss Mildred Birnbaum and Abraham M. Aronson, XIV, were married in Jersey City, N. J. — On January 13, Miss Rebecca Berger of Bangor, Maine, and Solomon M. Silverstein, X, X-A, were married in Brookline, Mass. They honeymooned in Florida. — J. C. Mahoney, X, has been with the Tidewater Oil Company for about two years at Bayonne, N. J., engaged in process and engineering development work. Mahoney reports that H. R. Swanson, X, is with the Power Specialty Company in New York. — The engagement of Miss Marion Vincent Park and George H. Atkinson, X, of Stoneham, Mass., has been announced.

Dugald C. Jackson, Jr., VI-A, sometimes known as D. C., Dug, or Duggie, writes an entertaining letter from Louisville, Ky., where he is a professor in charge of the Speed Scientific School of the University of Louisville. "I enjoyed the last Technology Review and particularly the 1921 news, probably because two of my good friends were heard from, Harold (Cookie) Cake, VI-A, and George Shoemaker, VI. I also enjoyed the 1922 news with mixed feelings. Due to my having taken my S. M. in 1922 with the first class to graduate from VI-A, I knew quite a number of 1922, and Hodgins' effusions as Gensec are always entertaining. But how does he get that? Again in this issue of The Review for the 'steenth time he grabs off one of the Class of 1921 and palms him off as a member of 1922. I speak of Walter J. Hamburger, II, who is listed even in the Register of Former Students under the Class of 1921. Hodgins says, "We insist on completing Walter's

1921 Continued

record in these columns despite his savage insistence that he belongs in the Class of 1921 . . ." Insist, mind you, — has he no courtesy, no forbearance? But that is what one may expect from a member of 1922, and one who has been so long associated with The Technology Review. Last year he included in 1922, two or three of the Class of 1921 who received their S.M. in 1922 in Course VI-A, the S.B. being 1921. As I remember it, two of these were George A. Chutter and Ralph M. Shaw, Jr.

"I can well understand that having insufficient outstanding men in his own class, the Gensec of 1922 might be tempted to purloin a few from a neighboring generous and forbearing class. But to think that a Technology man would actually do it. And why should he continue to steal our thunder for the glory of his class?

"Speaking of Chutter and Shaw reminds me that Chutter has a baby, born last September or thereabouts, but right now I do not remember whether boy or girl, and I cannot find any record. Shaw was married late last spring. Most surprising, for he always could get along very well without girls, although they always liked him. Shaw is with the United States Iron Pipe and Foundry Company of Burlington, N. J. Chutter is still with the General Electric Company in Schenectady. Dave Woodbury, VI-A, acquired twins last summer which gives him three children living, for he lost his first baby. Dave is still on the editorial staff of the General Electric Review.

"Speaking of twins reminds me that Herbie Nock, VI-A, has four children, two of them twins. Herb is back with the General Electric Company at the West Lynn Works. Twenty-seven men started VI-A in the junior year, in the fall of 1919, one more entered the next year from Harvard and Leland Stanford, making the total registered in the course twenty-eight. One left to get married without receiving a degree. The other twenty-seven all graduated and sixteen of them are married now — maybe more than that — but I know of only sixteen married, or 59.3 per cent of those graduating are married. Six of them have children, 21.2 per cent of the twenty-seven, and 37.5 per cent of those married. There are at least thirteen children living, giving an average of about one child to each married VI-A 1921 man. There are about one-half as many children as there were VI-A graduates in our Class. We have two sets of twins in VI-A, Nock's and Woodbury's, or 30.8 per cent of the children are twins. Can any other course beat these figures — honestly?

"You probably know that Paul Rutherford, VI-A, left the Lynn River works of the General Electric Company to go to the Delco people in Dayton, Ohio, to take charge of the development of small motors for the Frigidaire."

At the Northeastern University Evening School of Law in Boston, William Wald, I, is in the Class of 1929, and Ambrose L. Kerrigan, VI, is in the Class of 1931.

Ray has been doing a great deal of traveling lately, but he managed to get in some of the above notes. The Asec is going to carry on for a while without him. Bite off the end of a new pencil or sharpen the Waterman and write that "billy ducks" now. And to all wandering

'21 men who land in Philadelphia, a free lunch is hereby offered (to those who can't pay for their own) to induce them to take a bus across our beautiful Delaware River Bridge to Camden where they can tell the news to the Asec personally and thus save postage. — R. A. ST. LAURENT, *Secretary*, 431 Oliver Street, Whiting, Ind. CAROLE A. CLARKE, *Assistant Secretary*, Victor Talking Machine Company, Camden, N. J.

'22 We have only one Secretarial report to present this month, but it comes from George Holderness, thank the Lord, and the Minnesinger of Gramercy Park has outdone himself to an extent which will, we think, lull the other Courses into a forgetfulness of the neglect which their representatives have inflicted upon them.

Our own report will be brief, but we can at least present one letter. It is from Erb Ditton who wrote from 575 Park Avenue, New York. Sez 'e, in part: "I don't see many of the Technology crowd these days. Eddie Koehler is still with Vivaudou (Vice-President) and now has two sons. Roger Ingalls still makes dies for Zinssey and likewise has two kids — a boy and a girl. Bill Taft, after marrying and moving to Cuba with the Hershey Company for two years, is back and has a job with some company making tannin products in Wilmington. Carl Kudlich is likewise married. He is doing commercial art work around New York. Like the well known 'four out of five,' I'm the fifth and not married, so the same average must apply to this, too. I still make silk hosiery with the Gotham Silk Hosiery Company of New York. I see Charlie Roll when he is in town, but, as you know, he calls you up on Monday and by Wednesday you get a postal card from some spot in Europe, Asia or the Lord knows where. When last heard from, he was on the Riviera and planning a trip through Italy with Otto Rickers. Remember, regardless of the new and heartless attitude of The Review management concerning lengthy, verbose and embellished drippings from your pen, the post office doesn't object to carrying them nor I to receiving them. . . . No, the handwriting has not improved."

The only other nugget of news which we can record this month relates to Lt. Comdr. J. M. Shoemaker, who took a Master's degree with our Class. He is assigned to the engine section of the Bureau of Aeronautics of the United States Navy and has completed additional duty as a member of a board convened to select officers for post-graduation instruction in ordnance.

We have had only one more caller since previous report — the amiable chemist, Mr. Joseph Henry Keenan, who dropped in a short time ago to say that all was well and that he was newly a father. Congratulations were promptly and heartily offered.

And that's all. — ERIC HODGINS, *General Secretary*, 8 Arlington Street, Boston, Mass.

COURSE IV

When, just before the last Christmas holidays, our old friend, Eric Hodgins favored us with his monthly urge for a letter, we begged off with the excuse that at that very moment we were packing our toothbrush and odd collar for the annual trek into Arkansas.

Realizing that it was not exactly *de rigueur* in the secretarial world to beg off from writing we compromised by agreeing to write later a letter that would make up for all omissions, in fact one that would make strong men bend and weep. Alas, the embarrassment of our position! It now develops that the material for such a communication is not at hand, and even if it were we lack the facility of presenting it in a way that would make the aforementioned strong men wax lacrimose. Of such is the fallacy of human promises.

Under normal conditions a letter which purports to chronicle the doings of any group of old grads will be found to contain news that can be assembled roughly under three heads, namely marriage, fatherhood, and change in position. This, then, is a normal letter indeed, and we intend to assemble our items under these three heads and very, very roughly. On examining the evidence we find that there is at least one deponent for each division, and that no one will be included in more than one section. Considering the time since our last letter there are obvious biological reasons why no name will occur in divisions 1 and 2.

Perhaps the most sensational occurrence of the first classification is the marriage of Marion Thomas and our own Marion Stuart Dimmock. Inasmuch as the respective parents of the contracting parties displayed so little ingenuity in the selection of names for their offspring there is nothing for us to do but to call them Little Marion and Big Marion. There is no use of beating around the bush, this affair was a shock to us. The sad cases of such men as Baldwin, Carven, and Amon, all stalwarts of the unmarried ranks, had already shaken our faith in the single life, but the defection of Marion Dimmock, that bulwark of bachelorhood, whom we always had regarded as the Gibraltar of celibacy, has reduced us to the mental state of a veritable hermit. However, our staunch refusal to enter into entangling alliances with the opposite sex does not prevent us from recognizing quality in that quarter when we see it. We know Little Marion, and we herewith give her our stamp of approval, together with our official signature and seal. In fact, we like her so well that we might say "pretty lucky, you big stiff" to big Marion, but we won't. The Marions live at 135 East 50th Street, where they probably will be glad to see you if the elevator man likes your looks. Of course, every man is entitled to his likes and dislikes, with which thought we consoled ourselves for the difficulty which we experienced in gaining ascent to the Marions' apartment.

The only other connubial venture of which we have any knowledge involves Bertram A. Weber, sometime captain of the Technology swimming team and all-time champion at the indoor sport of focal center. There is no need of telling the readers how much we think of Bert, for did we not simultaneously undertake the doubtful adventure of residence at 292 Newbury Street, and did we not just as simultaneously move across to 289, and share and share alike at both locations? But Bert's matrimony is at this date only contemplated (although his intentions have been publicly announced, and, perish the thought, may be accomplished by the time this is published) and we refuse to take it seriously. We should be glad to give you the name of the young lady, but we have inadvertently mislaid our

1922 Continued

notice. Suffice it to say that if Bert carries this idea through we shall know that the man whom we always regarded as a professional bachelor was only a rank amateur after all. Say it ain't true, Bert!

Having thus disposed of the Rice and Old Shoe news we come to Section 2, under which head come the little things of life. Since our last letter to The Review, both Cass Amon and Ross Wiggs have something running around the house besides a fence, or at least they will be running around the house if you just give them time. Master Albert Halstead Amon is at this writing something over six months old, and at this tender age has already shown signs of a rotund countenance and ability with a lead pencil, to say nothing of a marked predilection for afternoon tea parties, characteristics which long have been part and parcel of his distinguished father. Up in Montreal little Marjorie Browning Wiggs has made her debut into the world, and is quoted as being very well pleased with her parents, who in turn are probably little short of cuckoo in the happiness of their new possession. Like Albert Amon little Marjorie has a heritage of rosy cheeks and easy crayon manipulation, but unlike the scion of the Kentucky prodigy she doubtless was born with skis on her feet and an alpenstock in each hand. At any rate, we rise to congratulate all parties concerned with the above phenomena, and to warn Cass and Ross not to leave thumb tacks around on the bedroom floor if they have not already found out for themselves.

Under the heading, Changes in Position, the chief exhibits this time are G. Dewey Swan (known colloquially as Dozey), John De Witt Clinton Archibald, and Slick Schley. Dozey seems to be chief cook and bottle-washer for the firm of Robert J. Reilly, of 10 East 41st Street, and Arch is head balustrade tester with the same outfit. At last report, each one was doing an elevation for a convent over in Jersey or somewhere, and there was a mutual hope that the elevations would fit together in the end (if nowhere else). Dozey, incidentally, has taken over the Wiggs apartment at 2305 Sedgwick Avenue, the Bronx, which enables little Patsy to stretch her legs in a nice park just across the street.

Slick Schley has weighed architecture in the balance and found it wanting. He has rejected the faith which he so solemnly espoused at the shrine on Boylston Street, spurned the profession which has enabled men like Wiggs, Swan, and Archibald to own automobiles. To be exact, Slick has decided that there is more coin of the realm in selling apartments than in drawing them on paper. The impression seems to be that a customer for apartments is born every minute in New York, and Slick hopes to separate some of these minute men from their hard-earned cash in exchange for upper berths in local tenement houses. The name of the firm is Irons and Hoover, and if you don't contemplate the purchase of a slice in a local domestic skyscraper you would do better to keep out of Slick's way, for it is his duty and avowed purpose to clutter up the well-known dotted line with signatures of minute men like yourselves.

Your Secretary regrets the long lapse of time since his last letter, and what he craves most is to have you fill his portfolio with news. If you can't break into the select com-

pany of husbands and fathers, try Listerine or French in Ten Easy Lessons, but above all write us something. A secretary can never do his best work on an empty portfolio. — GEORGE S. HOLDERNESS, *Secretary*, 17 Gramercy Park, New York, N. Y.

'23 One of the first news items received this month was an announcement of the marriage of Miss Leah H. Wright of Franklin, Mass., to Edward S. Averell on January 14. Congratulations and best wishes, Ed. — We received a letter with a contribution to the Athletic Fund from Austin Myers in Victoria, Australia. Myers says: "As to what I am doing, I came out to Australia in 1925 to finish the installation of machinery in A. G. Spaulding and Brothers' new factory, and when this was completed I then took charge as factory manager. I expect to return to the home plant early next year. My place here will be taken by Joe Preston, also a Course X-B man. He expects to leave the States about the first of December. I have one daughter, who may yet prove to be a candidate for M. I. T."

Ray Eiffe is now apparently in training for more lucrative employment than that offered by the engineering profession. He is assistant in charge of stills at the Eagle Works plant of the Standard Oil Company of New Jersey, located at Claremont just outside Jersey City.

On January 19 the '23 men located in the vicinity of New York City got together for their second gathering. Assistant Secretary Bondie was able to arrange a business trip that landed him in New York on that night so he was able to attend. Walter Marder sent us a very nice report of the meeting which follows: "We had twenty-three men there including Bondie. They are as follows: J. B. MacLean, J. W. Sands, C. M. Mapes, R. M. Goetchius, R. H. Henderson, Paul Ryan, Harry Green, A. A. Kenney, I. Robinson, L. J. Ellis, K. S. Andem, G. W. Bricker, Jr., A. A. Buhler, R. W. Fox, O. L. Hooper, L. L. Tremaine, W. S. Marder, Jr., N. M. Stepnoff, R. E. Valentine, J. M. Keck, Stuart Gourley, P. L. Coleman, and H. L. Bond."

"Bondie gave us several pointers about the coming Reunion and all aspects of the outing were discussed. There was so much enthusiasm shown that \$34 was collected on the spur of the moment in order to help defray the initial expenses of the committee. There was some semblance of organization established for the '23 men in New York and the following officers were elected to serve for the present year: L. L. Tremaine, President; O. L. Hooper, Vice-President; C. M. Mapes, Treasurer; and yours truly as Secretary. It was decided that the next meeting will be held sometime late in April or early in May."

Let me again urge you New York men who haven't attended these meetings to drop a line to Walter S. Marder, Jr., at 63 Grove Street, Plainfield, N. J., so that you will be on the mailing list for the next one. Marder would also be glad to hear from any '23 men who happen to be passing through New York.

At the time these notes are being written, there is very little to be said regarding the reunion plans other than has appeared on the questionnaire. There are still a number of

these questionnaires which have not been returned. If yours is one get busy and send it in now. This is very important.

A number of men, fourteen to be exact, found their way to the University Club Technology Table last month on the day designated for our Class. The following men were present: H. H. Spencer, Gerry Cooper, J. K. Clapp, Charlie Snow, P. S. Rice, W. N. Webster, Bob Hendrie, Frank Haven, G. W. Bricker, Don Height, Roy Sterling, Myron Chandler, C. H. Chaisson, and H. L. Bond. It certainly brought back memories of Technology to see so many familiar faces. We hope that the attendance at each succeeding '23 luncheon will be greater than the one before. Just reserve the fourth Tuesday of each month from 12:30 to 2:00 for this luncheon. — R. E. HENDRIE, *Secretary*, 12 Newton Street, Cambridge, Mass. H. L. BOND, *Assistant Secretary*, 18 Greenwood Avenue, Hyde Park, Mass.

COURSE II

To the best of my knowledge I only know one of the gang who is located in Washington and that man is Algernon Flournoy. To make a short story shorter, I was in Washington a couple of weeks ago and was walking down the street when who should I run into but Flournoy. He hadn't changed a bit since five years ago, and, believe me, I was glad to see him. But he didn't know of any of the Course II boys so I was unable to get much information from him.

However, it was just a few days later that I got a letter from Howard Russell. Howard says that during 1927 he traveled 32,000 miles for the company he works for. And he really does use his time to good advantage, for he sees more of the old crowd than all the rest of us put together. With the unanimous vote of the rest of Course II, I'm resigning my position as Course II Secretary, and nominating Russell in my place. Motion duly seconded and passed without a dissenting voice. Howard is the right man for the job, for he gets around, while I, cooped up in this little Indiana town, neither see nor hear that which would be interesting to others. (Secretarial note — This motion is ruled out of order. However, Howard Russell is hereby appointed as Traveling Assistant to Harold Gray, and his duty will be to report to him on all '23 men encountered. Will you do this, Howard? Gensec.)

Howard says that he got a card from L. W. Hanson which said "Greetings from Mr. and Mrs. L. W. Hanson, and Junior," and he says that I can draw my own conclusions. I'm not going to draw any conclusions, I'm going to say congratulations, and let it go at that. Howard also wanted to know what the latest news is on the subject of the Reunion. He says he is going to be there, regardless, and while I shall not make any rash statements I shall make it if I can. It will be fun to meet the crowd again.

I got the cutest little Christmas card from Arthur Edwards with the alibi that he couldn't write for awhile because the days were so short now that he didn't have enough time. Gee! Didn't that fellow ever hear of night work? If he hasn't, well, he has missed a lot, that's all. — And speaking of cards, I received a wedding announcement from Robert Perry. The lucky young lady in the

1923 Continued

case was Miss Madeline Cutchin of Wilson, N. C. I was down in North Carolina just a little while ago and, despite the fact that I'm married now, I'm not blind, and I cannot help but commend Bob on the country he went to pick out a bride. Now of course I think the Eastern girl is best, but the North Carolina girls surely give them a close run for honors.

Some people certainly do write brief letters, but perhaps the shortest one yet is one that I received from a firm of export agents in New York, with the following note: "We are requested by Mr. George J. Leewitz, in Paris, to pay you the sum of fifty cents by check, made payable to H. L. Bond, and when sending same to state that this was for the Athletic Fund at M. I. T. We suppose that you are posted regarding this remittance. Yours very truly, Markt and Hammacher Company."

The next letter I received was from Nelson Burtt. Nelson also encloses a check for fifty cents. He is employed as a mechanical engineer with John Stevens of Lowell, Mass., and he has been specializing in paper mill designs, so if any of the gang need an expert in this line they know where to go. He was married last April, and stated that he would not be single again for anything, in which statement I can join him without reservations.

My last letter of the group came from Frank Haven, and it is just about time, for I have been after Frank for a long time. However, an eight-page letter makes up for a lot of neglect, and if some of the rest of the gang would only do as well, I would be more than glad to call it square. His letter is so chock full of news that I am copying a great deal of it direct. In fact, as I read the letter over again in order to determine what to put in and what to leave out, I am tempted to enclose the whole letter. It's about the liveliest letter I have had for a long time.

"Russell is living in Providence and is with the What Cheer Mutual Fire Insurance Company, as you probably know. Speaking of insurance, the last I knew George Johnson was in the game, but I haven't seen him for a long time. I had lunch with J. Allan Abbott the other day. He is with Mead Morrison Company over in South Boston, selling heavy machinery, contractors' equipment, tractors, and so on. I also ran into two '23 men in Worcester the other night, E. H. Miller and Chapin. Miller is selling furniture and Chapin is selling transformers. Sterling is in the insulating and covering game (asbestos) in Boston.

"I saw Tappan one day out near Coolidge Avenue. I think he lives in Brookline and is a proud father now. One day in Quincy some two months ago whom should I meet but Lloyd Porter, who is with some big boiler people (B. and W., I think) and is up here to see that they do a good job at the new Edison station near Quincy. He also was kind enough to come to my wedding (or rather my wife's) at Martha's Vineyard last September. I understand that you are open to congratulations about this time too. Speaking from my wide and varied experience in this line, which is now very nearly six weeks, though it doesn't seem more than six years, I will say that it's all right. The only objection being that I can't seem to find time to do all the things that should be done. On one of my

several visits to the aforesaid Martha's Vineyard, I watched a hydroplane come into the harbor and who should be in it but Crowley. I met Ludeke up in Andover one morning. He is with Tyer Rubber Company. I forgot to tell you that Drisko was also at the ceremonials and in case you don't believe it, I think he might verify it.

"I saw a fellow named Woods (not sure he was Course II) at the Statler in Boston about a month ago. I believe he is with some printing concern and was attending the convention there. About a year ago I bumped into Bill Scofield out in Amsterdam, N. Y. He is on the road for the Philadelphia Reading Coal and Iron Company, I think, looking as fine as ever, married and living in Albany. Arthur Edwards is with Stone and Webster, doing power work. We are hoping to get together for lunch some day and talk things over a bit.

Fred Mann is with the telephone company in the automotor switching department. Burtt is with John Stevens doing power work, I believe. Pearson, who used to be in the engine laboratory is also with the same concern. I saw Roger Cutting some time ago. At that time he was selling packing (Garlock, I think). He is also married and living near Boston. As you probably know, Hanson is out in California with the California Corrugated Culvert Company and movie stars. I met Height at a wedding over in Melrose about six months ago. He also is married. I have seen Murray several times. He is with the United States Radiator Company in Boston selling heating specialties.

"I guess that's about all I can think of now. As for myself, I am still with Haven and Hopkins, Incorporated, doing engineering work of all kinds. Good luck to you and drop me a line at 49 Hillcrest Road, Reading, Mass., when you find time."

That's all for now, but don't forget that I am still with the Vitreous Steel Products Company, and that the town still has a post office and that the post office still forwards my mail to me. And also, while I am perfectly willing to manufacture notes about the gang if necessary, I am not a good enough liar to make them sound as convincing as the truth would be. Won't the hundred members of our course who have not written yet please get going? — HAROLD B. GRAY, *Secretary*, Vitreous Steel Products Co., Nappanee, Ind.

COURSE VI

Charlie Loud emerges from the maze of wires in the New England Tel. and Tel. Co. long enough to broadcast a cheery hello to his fellow artists. He says: "It seems ages since we used to struggle through certain P.E.E. courses together. I transferred from the long lines department of the American Tel. and Tel. Co. three years ago to the New England Tel. and Tel. Up here I am able to live at home and have a much better time than in New York. I still have only myself to support and consequently I have a pretty good time. My old hunkie, K. M. Smith, is still in Chicago with the Edison people; and I guess he'll stay there. I saw Baldy Haig and Elt Willis the other day. Ray Willis has left this company and I believe has gone home to join his father. Johnny Gegan is in the commercial engineering department at Portland, Maine. I'm still stringing carrier systems. I put five into Vermont for emergency circuits

and got to see a lot of the flood damage. I don't mind getting out of the office once in a while."

Eddie Rue picks up a trouble report card to write us. But he writes happily. He and his wife have moved into their own home at 668 Newton Street, Brookline, Mass. We infer Ed is still shooting trouble for Boston Edison. Of course he changes tactics when heading for home.

J. D. Preston, one of the big moguls in our dynamo laboratory, sends an athletic fund contribution from Texas, where he forms part of the Central Power and Light Company at San Antonio. If the contributions received weekly were snow we'd find it awfully hot and dry weather. Every little bit helps, and soon we'll have the postage account squared up and can begin paying the help. With the surplus our young athletic aspirants can buy fresh chalk for the tennis courts. But it would be great if we could add a worthy unit to the athletic equipment at Technology. An engineer is always better off if he can run faster or swim better, particularly after a boiler explosion. — A. L. PYLE, *Secretary*, 110 West 30th Street, Wilmington, Del.

COURSE VI-A

By roundabout sources of information, the dope is learned and our promise of more news about Charlie Koch made in our last appearance is now fulfilled. He is engaged to Miss Elma Junggren of Schenectady. Charlie used to journey often to Northampton — Miss Junggren is a graduate of Smith, so draw your own conclusions. It is understood that the wedding will be in April.

Your Secretary also chronicles another important event. This time it is the arrival on October 6 of Alan John Thompson. He should make a fine engineer, if early predilections count for much, as his main interests are food and the surprises found in electric lights. — JOHN H. THOMPSON, *Secretary*, 275 Harrison Avenue, Jersey City, N. J.

COURSE X

Our heartfelt thanks go to Bob Kean for the only letter in six weeks. Bob says: "Your postal followed me out here from Washington, Chicago now being my habitat. My occupation is research with the International Filter Company, at present upon 'Electro-Osmose,' see the November *Industrial and Engineering Chemistry*. A further item of possible interest is that I am being married in about a month to Miss Sarah Elliott of New Orleans, who is, by the way, the sister of Doug Elliott of the Class of '24, so the affair has quite an M. I. T. flavor. Bob Mackie, '24, lives only a few blocks away and I see a good deal of him. I have also seen Whitman and various others down at the Chemical Society meetings." Our very best wishes to R. H. Kean!

Karl Luger, who is with the Aluminum Company of America, made us another welcome call and said he had met Harold Leary and Art Hampton at the Chemical Show. Karl states that Cobb is with Semet Solvay and that Gregory is in business for himself as consulting engineer in Tulsa, Okla. We note that the January *Journal* of the American Chemical Society carries a paper by Bernard Lewis on active nitrogen.

More letters are needed. Just a few words about what you've done since 1923, and we'll

1923 Continued

have some Course Notes. — H. F. COTTER and D. S. DAVIS, *Secretaries*, Bureau of Tests, International Paper Company, Glens Falls, N. Y.

'24 We are making up for lost time. We weren't in last month, so we have a void to fill. To start with, let's take the letter I received from Erwin Hagen, now at 323 North Drew Street, Appleton, Wis. He reports: R. W. Tracy is still with De-Vilbiss of his home town. He likes his work, is getting along nicely and the company likes him. R. S. Wertheimer is in Longview, Wash., at 1201 22d Avenue, connected with a pulp and paper mill in that city, holding an important position. He finally states that he understands another '24 man went to the Kimberly-Clark Company last summer and thinks his name was Jennings. Not Don, because Don is reported as elsewhere as you will later note. Dan Keck has been there for some time, however. Anybody any idea who he means?

That's what I call a goodwill offering, and I appreciate it. Here's another from Paul Cardinal in part: "... so if you haven't already read over the enclosed clipping from one of the Paterson papers, by all means take a squint now." The clipping in part reads: "At a bridge party given in her home last evening, Mrs. Albert Sidney Lapham of 432 Park Avenue announced the engagement of her daughter, Miss Lorene Frances Lapham to Paul Joseph Cardinal, son of Mrs. Alphonse A. Cardinal of 319 Park Avenue." He goes on, "The real reason for my letting you in first on this news release is because I naturally knew several times as many fellows as were contained within the roll calls of Course XV, and I was afraid the '24 coeds from the other two courses might not see about my engagement. (The other two courses are General Study and the one out at Bonny Brae.)" Paul is still with the Hoffman-LaRoche Chemical Works.

In the absence of any other letters of this type, goodwill, free will, and all, I'll dispose of the clippings. From Professor Locke from the *Engineering and Mining Journal* of November 12 there is a picture of Dr. Kupferburger with this note: "Dr. W. Kupferburger, government industrial research scholar of the Union of South Africa, recently arrived in the United States to make a study of the base-mineral industries of the country. His work here follows a six months' study of these industries in England. Prior to his government service, Dr. Kupferburger was a faculty member of the department of geology of the University of Witwatersrand."

I am informed by The Review that Frederick C. Wappler affiliates with this Class rather than with '23, the Class to which he has previously been attached. Welcome! He is at 1060 Park Avenue, New York, and I hope he will get together with the New York gang at their monthly luncheons. That reminds me to mention the party both "stag and drag" which that group is planning for the night of Tech Show, February 3. George Knight will doubtless have more about that in the next issue.

I also learn from the Alumni Association that Irving Merkelson and Sarkis Zartarian are taking law courses at Northeastern Uni-

versity. I have a clipping from the December 31 issue of the *Boston Evening Transcript* announcing the engagement of Miss Margaret E. Hale of Watertown to George W. Knight. Cheer for George, because I consider him the greatest little organizer of the New York City members and no little effort on his part has made them very active. At the Annual Alumni Dinner we had an even dozen members present: John Holden, D. W. Kendall, H. F. Simonds, H. H. Houston, Walter C. Thee, George Neitlich, Raymond Lehrer, Philip Bates, A. A. Franks, Chick Kane, Johnny Fitch, and Carroll Dunn. But what? No Cowbell?

If you looked in vain last month for notes from this Class, no one regrets it more than I do. I hope you never have to meet the same empty space again. But remember, I must depend upon you if we are to realize that hope. — HAROLD G. DONOVAN, *Secretary*, 139 Girard Avenue, Hartford, Conn.

COURSE I

Your scribe is once more residing on the Atlantic seaboard and while journeying eastward from Montana was able to pick up several bits of information, which, when carefully pieced together, make the first presentable contribution on his part for the present season.

While the train crew unto whom I had entrusted my person upon leaving Chicago changed locomotives, inspected journal boxes, and cut out dead-heads in Pittsburgh, I cajoled a pay-'phone into giving me a connection with the Duquesne Power and Light Company so that I could hold a hurried conversation with Tapley. In fact the conversation was so hurried that I couldn't discover much as to what Tapley was doing to make himself useful, but merely learned that everything was going well with him, and that he was still single. Cynics will claim that there is some connection between those two facts.

My next stop of importance was at Washington, D. C., where I had the opportunity to look up Jim Robbins and Bill LaLonde, '23, both of whom were factors in our summer sojourn at East Machias some few years ago. At the time I saw them they were creditably taking care of the engineering work connected with the foundations for the Arlington Memorial Bridge.

I next drifted on to New York, and, thanks to the coöperation of Bill Correale, was able to break bread with three of my classmates one noon at the "Planters." Bill, Lank Harris, and Gress formed the trio. Bill is now one of the mainstays of the firm of Parsons, Klapp, Brinkerhoff, and Douglas. You have to be some pumpkins to work for a firm with a name that long. When I saw Bill he was beaming all over because of the fact that Ruth Elizabeth Correale was born November 21, just a few days before our gathering.

Lank is still with the National Surety Company, but he has made other changes, having married Miss Edith Bushnell of Montclair, N. J., on October 8. They are now residing at Watson Road, Lanwood, N. J. Gress is also one of our wedded members, having married Miss Theresa Wesley of Yonkers way back in September, 1926.

Lassiter and Blodgett are also in New York, but were unable to attend our meeting. The former is employed by Henry Manley, '02,

Engineer, and the latter is doing high finance with Dillon, Read. I understand that Blodgett, too, has married, but was unable to learn the details.

Ed Wininger had expected to gather with us, but his duties as construction superintendent for Barney Ahlers claimed his undivided attention that day, and so I was unable to see him. I have heard from him since and he hopes to make a trip to Boston soon, so I will try to secure an interview with one of the outstanding successes of our Course.

New York seemed a fertile field for a harassed correspondent in search of news, so I decided to stick around awhile and attend the regular monthly '24 luncheon. There I saw many men of various and sundry courses, but in particular I saw and catechized Frank Manley and Di Somma. Frank is still resident engineer for C. H. Tenny Company on their New York properties with headquarters at Nyack. His work is mostly concerned with right of way work and transmission line surveys. Frank married Miss Katherine Knowlton of Melrose last April 18, and looks as if the life agreed with him. Di Somma also goes on the married lists having committed matrimony with Miss Pauline Ross of Boston on June 17. He is working for the E. L. Phillips Construction Company.

Shortly after I reached Boston, the office phone rang and the welcome voice of Curley Fletcher reached my ears. Curley had taken a few days off from his job on the Tallasee River in North Carolina and was giving Boston the once over. We got together and swapped construction stories and cursed this water power game in general. Then we both went back to work. Curley is still single and carefree and reports that Jack Nevin, who is on the same job with him, is the same.

After seeing Curley, not many days passed before Don Moore made his presence known. We got together and had a real bull session. Don is just getting his strength back after an operation in which he parted with his appendix. From his looks he is recovering very rapidly. He is doing some interesting sales work for the North America Cement Company, and is located in their Boston office.

While wandering around the corridors of the Institute the other day, I noticed the inscription "D. C. Sayre" on one of the office doors. The gentleman was not in, so I was unable to verify the rumor that he is the one and only inimitable Sayre of limerick fame, but I have been told he fits the description. What is the Institute coming to? It seems that Dan is imparting knowledge to would-be aeronauts.

Seems to me that this scoop in part condones my enforced silence in the recent issues of this publication. Now that I have gotten started I hope to keep the ball rolling with your assistance. Address all communications to JOHN D. FITCH, *Secretary*, Charles T. Main, Inc., 201 Devonshire Street, Boston, Mass.

COURSE II

With the beginning of the new year, your Secretary thinks this an excellent time to start things over again. We did pretty well for a few months last year, but are a total loss at present. The reason for their being no notes from our Course is due to just one reason and that is, yourselves.

If every one of you would get ambitious

1924 Continued

for about fifteen minutes and disregard modesty for a short time, we could have the best course notes appearing in this section. Are the Mechanical Engineers going to be so far behind every one else? Why not have some news in these columns that I am sure every one would enjoy reading? I will expect to get a letter from every one very soon, and if you don't send one in immediately, I hope your conscience will hurt you until you do.

Bill Ridge is married and living in Boston. That is the extent of my information about him. — I understand from H. V. Robichau, I, '25, who is now with the Atmospheric Nitrogen Corporation for a few months, that John Davey was married some time ago. — Bob Reid is still with the American Fan and Blower Company, out of Boston. — An occasional word comes indirectly from Dick Bushnell that he is a junior engineer for Stone and Webster. — Al Bailey is here in Syracuse with an insurance company and commutes daily from Oneida, a distance of about thirty miles. — Bill Taylor, part '23 and part '24, was married in Russia last October, and is with the United States Machinery Company as representative in Europe.

We are attempting a revivification of the Central New York Alumni Club of M. I. T., and if any of you come this way do not hesitate to let me know about it so we can have a get-together with the Club. — F. S. HUNGERFORD, *Secretary*, Guild House, Solvay, N. Y.

COURSE X

On Christmas Day, Lon Stephens Gregory and Eddie May Dewees were married in Homer, La. And on the next day William Bray Coleman and Laura Layman Withers were married in New York City. Five weeks before that, Bert Grahame became the father of Allan Richard Grahame. He is still with the Texas Company in research and development work and is now in charge of a department, and very busy.

Joe Carnagey, '25, is still with the Aluminum Company of America. He says they are good people to work for. Warren Hill has been transferred from the Rockland and Rockport Lime Corporation to its subsidiary, the Hoosac Valley Lime Company at Adams, Mass., to supervise the erection of a new two-kiln lime plant and to superintend the operation of the same on its completion. Ted Acker made a trip to Chicago and reports that Bob Mackie is engaged in some real hobo chemical engineering. Ted is still out in Bellaire, N. Y. Stretch Johnson dropped in on Ted and Bob from nowhere at all.

We have a new address. — WILLIAM B. COLEMAN, *Secretary*, 14 Grace Court, Brooklyn, N. Y.

COURSE XIII

Apparently the job of Secretary for Course XIII has been passed over to me by our former genial Secretary. My first knowledge of this, however, was the announcement in the January Review, and later by a letter from our General Secretary.

Quite a bit of interest has occurred since the last time we appeared in print. During Christmas week six of us, with wives and fiancées, gathered at my home for an evening. We had the pleasure of having Professor and Mrs. Jack as our guests. This brought some of us together who had been apart for over a

year. Gubby Holt was in Quincy for the week, so he was gathered in with the rest of us living within fifty miles of Boston. This is the first occasion of its kind, but we hope it will be continued in future years. Course XIII fellows should keep this in mind and if possible head for Boston at Christmas time.

We got news that Ernie Stone is working diligently at the General Electric plant, where he had been offered the chance to go back to the Institute, but he decided one stay was sufficient. — Gubby Holt is superintendent of baking for the National Biscuit Company at Baltimore, Md. — El Thayer is still contemplating marriage and at the same time is helping out at Fore River. — Harold Young has decided that the East no longer holds any charms for him and he is planning to head for the coast and California as soon as he can collect the fare. — Fred Ashworth returned home after the party to be operated on for an infected leg. According to latest reports he was progressing. The infected leg, however, didn't keep Fred away from Boston or from traveling one hundred miles to meet the bunch. We like and commend his spirit.

Word from Ed Russell expressed his regrets at not being able to attend. Being stationed at the time on the forbidden island of Nantucket during December had its drawbacks as transportation to and from the island is none too good. If the New England Tel. and Tel. Co. haven't changed their plans, Ed is now making his headquarters in Providence. — We understand that Frenchy Rousseau was in Boston for a few days about the middle of December. We hope when he is this way again he'll find time to get in touch with the Course Secretary. His latest address is 22 Stiles Street, Elizabeth, N. J.

We are only a small Course and we have endeavored to keep in personal touch with all the members of the Class of '24, but at this writing the news and locations of Jimmie Lord, Jim Wong, Tony Rosado, and Ing Lee are missing. If The Review reaches any of these fellows please let me know your whereabouts, and we'll look you up, for everybody is still interested in you. Nothing new with regard to me. I am still located in Boston with the N. E. Tel. and Tel. Co., and I will be only too glad to hear from any of you fellows at any time. — GORDON C. JOYCE, *Secretary*, 16 Grove Street, Malden, Mass.

COURSE XV

The Boston *Evening Transcript* of January 5 contained the following announcement: "Mrs. Albert Sidney Lapham of Paterson, N. J., has announced the engagement of her daughter, Miss Lorene Frances Lapham, to Paul Joseph Cardinal, a graduate of the Massachusetts Institute of Technology and a member of the Phi Kappa fraternity. He was prominent in student activities while at Technology, having been in the Tech Show and for three years associated with *The Tech*, the undergraduate newspaper, of which he was editor during his senior year. He is well known also as a pianist. Mr. Cardinal is the son of Mrs. Alphonse A. Cardinal of Paterson." Congratulations, Paul!

The same issue of the *Transcript* also printed the following: "An across-seas romance is found in the announcement by Mr. and Mrs. Victor Scharf of Vienna, Austria, of the engagement of their daughter, Miss Renee

Scharf, to William Rosenwald, son of Mr. and Mrs. Julius Rosenwald of Chicago, Ill. Miss Scharf and her parents are stopping in Chicago on their way home from Buenos Aires, where Miss Scharf met Mr. Rosenwald, who is a graduate of the Massachusetts Institute of Technology, 1924."

Phil Blanchard has been recently in Boston, on leave of absence from his work with The Superheater Company of New York in East Chicago, Ind. — Your Secretary had lunch with Phil and Carl Bartow, who is now with the National Fire Protection Association here in Boston. — Matarese is continuing his work in the Charles H. Tenney course here. — Ken Walton is located in Atlantic City, N. J., where he may be addressed at 1214 Atlantic Avenue. — Ted Taylor has moved to Buffalo, where he is with the Hewitt Rubber Company at 240 Kensington Avenue. — Fritz Gemmer has gone to Atlanta to be the sales promotion representative of the Marmon Motor Car Company in their Atlanta office in the Hurt Building.

We would also appreciate news of Ed Dunlaevy, who, it is rumored, is back in New York City. New York also claims Dusty Rhodes, in the Treasury Department of the Western Electric Company. Dusty was married on November 26 to Miss Margaret Duryee. They are living in Englewood, N. J. Our best to you, Dusty. Let us hear from you when opportunity favors.

Al Liff is now with Bloomingdale's in New York City. — Sam Zerkowsky has been transferred to Filene's Worcester store from Boston. — Tom Fitzgerald is on the teaching staff and is coach of athletics at the Brookline High School. — Nish Cornish writes from Youngstown, Ohio, that he is now chief inspector of Plant Number Two, of the General Fireproofing Company, concerned chiefly with the production of metal furniture and equipment. — Zartarian is an inspector for the Massachusetts State Highway Department. — Mel Wagner and Don Jennings have been recent visitors to the Institute. Don is neither lost nor deceased as reported, but has been busy traveling for the Bemis Brothers Bag Company of Detroit. — JOHN O. HOLDEN, *Secretary*, 110 Monroe Road, Quincy, Mass.

'25

Some of our classmates are still going to school. The latest ones to be reported are Scott Emerson, X, and Joseph B. Klanier, who are now in the Northeastern University Evening School of Law, in Boston. Chink Drew, XV, is still after a Master's degree in Business Administration here in New York. The best I can do is to study a lesson or two of the Army Correspondence Courses, which are much easier than anything I had at M. I. T.

Frederick W. Westman, IV, is engaged to Miss Eleanor Proctor Fuminger. This news comes from George Stark, who came in from Garden City to pay the Technology Club a visit during the week-end. George made us quite envious with his stories of going skating any time he felt like it; providing the ice was good. Personally I don't think this is much of a winter with so much mild weather.

We haven't seen Dick Tryon, II, for some time, but we have heard that he and his wife had the misfortune to lose all their belongings

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in a fire. — Wilder Perkins, II, has been working on a new oil-less bearing which the Manhattan Rubber Company is developing. At our last class dinner, he and Alpern, VI-A, were talking over the design of an eddy current brake to replace a Prony brake which didn't have close enough adjustment, and wouldn't keep cool.

Don Wheeler, II, Roger Parkinson, II, and I have been reviewing thermodynamics lately, in trying to solve some drying problems, and also to see what some boilers were doing. My own job just at present is in connection with some boilers which are being changed over to powdered coal. The combustion chamber has to be made larger, air-cooled walls and a water-cooled arch put in, and the baffles changed. The men in the field are going to have a lot of work in ripping out some old concrete walls. I think this boiler room will be much better than the last one I designed for Eddie Miller. — FRANK W. PRESTON, *General Secretary*, 17 Gramercy Park, New York, N. Y.

COURSE I

Our Class and Course were pretty well represented at the Alumni Dinner in Boston this year. Twenty-Five was one of the few classes to fill two tables and nearly half of the '25 representatives were Course I men. Those who were present to gather around the festive board were Putnam, Colby, McLaughlin, Prescott, Robie and yours truly, to mention only Course I men. From some unknown source there seemed to emanate enough spirit to loose tongues and whet appetites, and a glorious time was enjoyed by all. There was not much news to be found, however. Prescott decided that he would like to spend a winter inside for a change, so he is back at the State House. Steve Spencer is also working for the Highway Department. Walt Westland's engagement was announced some time ago, but no one could remember to whom.

Casey Reynolds sent the following letter to Orville B. Denison, '11: "Just a word from this part of the world to let you know of my recent activities. As you probably know, I and the family sailed from New York on July 21 for a year of study of hydraulic laboratories, I having been fortunate enough to win the John R. Freeman Traveling Scholarship for 1927 to 1928 of the Boston Society of Civil Engineers.

"We arrived in Bremerhaven on July 31 and went directly to Berlin, where I enrolled for a course in German at the University of Berlin. We left Berlin on August 20 for Danzig, going by train to Swinemünde and then by boat to Zoppot, a famous resort on the Baltic and not far from Danzig. Shortly after our arrival, the other five scholarship students also arrived there for studies in the Technische Hochschule in Danzig. Among these men were M. P. O'Brien, '25, and J. B. Drisko, '27.

"We were in Danzig until September 30, during which time we had a course of lectures on the "Laws of Hydraulic Similitude" by Dr. Winkel of the Hochschule. We also had an opportunity to work in the Laboratory. At this time our paths separated. Mr. Drisko remained in Danzig, Mr. O'Brien went to a hydraulic laboratory in Stockholm, while I and three other scholarship men came down here to Karlsruhe.

"The laboratory here is one of the largest in the world just for the study of river-flow problems, and we hope that as a result of our year of study that we shall be able to help in solving the Mississippi River problem, and other similar problems. Mr. Freeman, '76, has certainly opened up for us a wonderful opportunity in making these scholarships available. He visited many of these laboratories last summer and helped pave the way for our later work. His help has proved inestimable.

"At present I am enrolled as a regular student at the Technische Hochschule in Karlsruhe and am attending several lectures a week on the general subject of hydraulics. The lectures are entirely in German, but in spite of that I can really understand the most of them. I am spending quite a few hours in the laboratory, making and observing experiments and endeavoring to learn all that there is to be revealed about the layout and equipment of a laboratory. The work is intensely interesting and I am thoroughly enjoying my work.

"I am expecting to remain here until March, when I hope to see the Rhine and part of Belgium, after which I shall visit several of the laboratories in Germany. Before I return I hope to go into Switzerland so as to visit several hydroelectric developments there as well as see a new hydraulic laboratory just being constructed. I expect to return to the States so as to go to Summer Camp as usual.

"The family are all well and we wish for you a happy Christmas and a prosperous New Year. Kindly remember me to any who may inquire for me."

I received a Christmas card from Frostie that was postmarked Cushing, Okla., and on which he had written, "Expect to be headed for Tucumcari, N. Mex., by the time you receive this."

Worthington is now located at the United States Engineer's Office, Coal Exchange Building, Huntington, W. Va. — Last Wednesday I had to leave Boston on two days' notice for a six months' stay here in Syracuse. While here I will be working for the Atmospheric Nitrogen Corporation on loan from Stone and Webster. I haven't been here long enough yet to know just what the work will be, but it will be in connection with the development of a new plant in Hopewell, Va., for the Atmospheric Nitrogen Corporation. I guess that I will have to resurrect our old friend Norris' "Chemistry" and review the Solvay process. I haven't received any letters of late. Obey that impulse. — HAROLD V. ROBICHAU, *Secretary*, Atmospheric Nitrogen Corporation, Syracuse, N. Y.

COURSE II

Well, it's the same old story. One old faithful crashes through with a letter and the rest of the fellows remain shrouded in a veil of mystery. This time the faithful one was Toni Lauria. Toni is still with the Goodyear Company but has changed his headquarters to Lexington, Ky. From what he says the roads down there are terrible and his job of trying to make the bus tires stand up under the strain is not as simple as it might be. In fact, the states use the busses as part of their road-building equipment. The idea is to dump chunks of stone on the road and let the traffic

smooth it out. Toni still insists that he doesn't rate any space for an announcement of his engagement, or better yet, his marriage. That's twice now he has disappointed us. When the time comes we ought to run a special edition.

Toni still keeps in touch with some of the outfit. Wade Johnson is still in the research division in the Goodyear Factory. Lloyd Irving has been transferred from the Los Angeles factory to the main one in Akron. Jim Holland has left the Goodyear gang and is working with the J. C. Heintz Company, making electrical tire repair apparatus. Toni adds that it is a good job and that Jim frequently gets to Akron on business. Some time ago Toni was sitting in a hotel lobby in Knoxville, Tenn., and observed a young man who on closer inspection proved to be none other than Nelson D. Malone. Jocko is still with the Associated Factories Mutual and now is an expert in the textile end of things. To prove this fact he showed Toni around one of the cotton mills. Well, all he could say was, "Boy! He knows his stuff." I could have told him that from here. I also should add that Jocko remembered me with a Christmas card which pleased me not a little.

Speaking of Christmas cards, I received one from Diz Doucette which also bore an invitation to join him and the fair lady at dinner some evening. I only wish I were a little nearer Chick's new home. I sure would have been there by now. Perhaps he'll find time some day to write a letter and tell us all his adventures. The word adventures reminds me — what's become of Chipendale? I haven't seen his name mentioned very seriously for Mexican president. Gus Hall reappeared on the scene at the last class dinner. Gus has been working so persistently at making waterless gas holders that he hasn't had time yet to find out what being married is like. He's the same old Gus, though.

Carl Mabley was slated to be at that dinner, but was conspicuous by his non-attendance. After several months of silence, Dick Tryon writes to say that he'll be in Elizabeth until May. I hope that when he gets word that I'll be in Buffalo until May (and then some) that he'll send me a visit by mail. I've been up to see Jack Rountree at the Falls several times — even watched him climb into a Tux on New Year's Eve. Fellows, you should see Jack all dressed up with a derby. Well, even if it did belong to his roommate it looked swell, yes *swell* is the word. Jack is still living with Dick Wick, X. I don't mean to infer by that that it is remarkable that Jack and Dick are still on good terms. Before I pull down the shades, I might say that if Walter Hickey is still in Massena and if he would write and tell me where, some sunny day I might fill my gas tank and pipe and call on the gentleman. Well, anyway, I guess I've said enough. — ROGER WARD, *Secretary*, Curtiss Aeroplane and Motor Company, Inc., 74 Kail Street, Buffalo, N. Y.

COURSE IV

Christmas brought forth an array of greeting cards as usual, but they were not all conventional. Shepard Vogelgesang sent a most Bohemian greeting card, done in blue and black and green, which words completely fail to describe and upon which were inscribed the following: "Dear Pete: It is good luck

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your card finally reached me here in Vienna, as the changes of my address have been frequent since Pequot Avenue. I am putting in the final licks at studying with Josef Hofmann. I return to America early in the spring or summer to work. I find this Vienna business most interesting and valuable and would gladly have had much more . . ."

From Mary Elizabeth and Freddie Winsor in Tuckerstown, Bermuda, comes a promise that when they "get a spare moment from building libraries and carriage sheds" they will write and tell about it. — Penelope and Roger Griswold portrayed what I think is their new home although they did not say so. It has a grandeur that is reminiscent and a warmth that is intimate and luxurious.

K. K. Ayer says that he has been in San Antonio a year and four months, first as a cadet at Brooks Field for six months and since then as chief office boy whose duties include everything that can be done in a small office. He even claims to have kept house while his employer was away on a vacation. He reports that Don Homsey and Fred Buenz were in the vicinity but that Don has returned to Boston and Fred has moved to Laredo. Max Sandfield is planning to go back to New York and is no doubt there by this time. Ted Steffian is also in San Antonio, a vacation he claims. Bart Cocke and Marvin Eickenroht, both of '23, have recently opened up an office there.

Fate was kind to me and gave me a transfer on New Year's Day, so now you should send your letters to CHARLES E. PETERSON, Secretary, Box 463, Deer Lodge, Mont.

COURSE V

This will represent my first attempt to chronicle the doings of all you test tube jugglers. George Tucker, the erstwhile incumbent, saw fit to doff the secretarial toga and indicated that it should fall on my shoulders. Now why Georgie did that is more than I can see. So far as I know, pleasant relations have always existed between us. I never did anything to merit wrath. Hence I deem his act to be one of hostility and hereby declare bloody war. *Tucker delenda est*. When the last Milot has killed off the last Tucker, you men can tell your admiring grandchildren just how the famous Tucker-Milot feud started.

Georgie, by the way, has left the Institute and is in the industry somewhere in Greater Boston. He achieved his doctorate in record time and, altogether, has more than justified our hopes in him. I haven't any direct news from him as yet.

In fact, there is a sad lack of direct news. I wish you men would write me a line or two. My address is somewhat ephemeral because I'm shacking all over New England, but I am best reached at my home, 117 Pine Street, Attleboro, Mass. I get home fairly often and sometimes motor over to Lynn where Paul Breer is living.

Paul, the big blond Swede, is still as lovable as ever. He was the first, and so far as I know, the only one of us to risk the Holy Bunk of Matrimony. Mrs. Breer is charming and a first-rate hostess. Paul extends a standing invitation to drop in any time at 42 West Baltimore Street, Lynn. His work, by the way, deals with patent leather at a plant in Peabody. He has apparently forsaken the

artificial leather racket with which he bored us in his talks before the Class. To my knowledge, he made use of the same oration no less than six times.

I often run across Sarkisian in my ramblings. He has been connected with the Fibroid Corporation of Indian Orchard, Mass., ever since graduation, and knows lacquer backwards and forwards. He has risen to be assistant technical director and, when last seen, had elected to continue with the same firm as traveling sales engineer. Sark is still giving Ramon Navarro a run for his money. In fact, he can spot Ramon two dances and a taxi ride and yet carry off the femmes high, wide and handsome.

There is only indirect news of Stanley Lane. He is in oil chemistry, I believe, and is popularly supposed to know which way any given oil stock will move on April 7, 1933, or on any other date, Sundays included.

It will surprise all of you to learn that Joe Cashman, handsome Joe, is working at the patent office in Washington examining patents. At the same time, he attends the Law School of Georgetown University and in the dim future hopes to be a patent lawyer. It's hard to imagine Joe in school again as a freshman. I don't think I'm betraying any confidence if I say he has bought a derby and (whisper) has made a down payment on a raccoon coat.

This is the limit of my gossip. By next issue, I hope to have heard from all of you. I don't insist on big, long epistles from you men, but I'm sure we should keep a little closer together now that the after-graduation uncertainty has resolved itself into a stable position for all of you. — GERALD B. MILOT, Secretary, Merrell Soule Company, Syracuse, N. Y.

COURSE XIV

F. P. Romanoff, acting as reporter, has gotten a news "beat" in discovering Ted Coyle on the Pacific Coast. He says: "Coyle was employed by the Metal and Thermit Company to work on chromium plating. The company formed the Chromium Products Company with Coyle as one of the chief executives. About June of 1926, this and one or two more companies merged and formed the Chromium Corporation of America, of which Coyle is the electrochemical engineer . . . At present he is stationed on the Pacific Coast. He has installed more successful chromium deposition plants than any other man in the world."

Romanoff also adds that Coyle is plating some immense cracking chambers for the Shell Oil Company. He is married to a "very sweet and charming young lady" from the vicinity of Boston. His present address is 2701 Durant Avenue, Berkeley, Calif. We hope to obtain the young lady's name by next month. — HOLLIS F. WARE, Secretary, U. S. Chain and Forging Company, York, Penna.

COURSE XV

Shortly before Christmas a questionnaire was sent out to every member of Course XV in the Class of 1925. As several were returned because of incomplete addresses and some may have gone astray, it is hoped that any one who did not receive one will drop his Course Secretary a line telling what he has

been doing, whether he is married and anything else of interest.

Two untimely deaths were a great shock. Edward D. Lucy died at his home in Utica, N. Y., on September 12, 1926, and John W. Gundling on November 20, 1927.

Of about 150 questionnaires sent out, fifty-eight have been returned. Of these, nineteen or about one-third are married, which is doing pretty well for the two and a half years since we left the Institute. And so far as we can find out Bill Nye is leading the list with twin daughters.

A word from David J. Abrahams: "I saw Bill MacMahon up on a ladder, said ladder being held in a state of equilibrium at its uppermost end by the front wall of the house of one highly esteemed citizen called Erwin Haskell Schell. Bill took me all over this fine example of a Colonial residence as it should be, incidentally explaining the tour with a talk which would have made a sightseeing-barker excusably envious."

Remember John Dempsey who stood — wasn't it seven feet and one-half inch in his stocking feet? Well, he is now a floor man in the W. T. Grant chain of department stores. — Chink Drew is still making Schrader valve insides over in Brooklyn. — Also Sam Samuelson is over there showing Abraham Straus, Brooklyn's largest store, even finer systems than the ones they have now. — Arnold Bailey is doing some kind of research in radio in the Bell Telephone Laboratories. — Up at Middletown, N. Y., Ed Fish is running a truck farm and developing new methods of marketing the products.

Frank Foss is watching the twenty-seven factories of the new Remington Rand Company being reorganized and consolidated into the world's largest office equipment organization. — Don Henderson is still in New York with Halsey, Stuart and Company. — Henry Hibbard has been doing some very interesting industrial engineering work in connection with the firm of Ford, Bacon and Davis of New York. — Al Crowell is in the advertising department of Pratt and Whitney of Hartford, makers of machine tools, tools, and airplane engines. — Joe Kaplan is office manager of the sales department and head of the sales statistical and research work for the Shelly Oil Company, Eldorado, Kansas. — Si Simonds is the Carrier Engineering Corporation's sales engineer in Los Angeles. — Dan Keck is in the paper mill business in Niagara, Wis.

H. W. Kochs is treasurer of the Technology Club of Chicago and is also doing chemical sales engineering. — Jim McIndoe is selling for the American Radiator Company in Washington and Oregon. — Sam Maddock is selling National Biscuits in New York. He is anxious to get in touch with some one who is in the production or distribution end of electric refrigeration. His address is Owls Head, Maine. — Bob Hochstetler is to be added to the married list soon. — Al Prentiss is the District Sales Manager for the Cyclone Fence Company in Denver. — Ave Stanton is the office manager of sales for the Hobart Manufacturing Company in San Francisco.

Bill Steinwedell is working with the Gas Machinery Company of Cleveland. — Bob King is head of the statistical department of the American Tel. and Tel. Co. of New York. — Don Taber, although not a Harvard man,

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is selling bonds for Estabrook and Company of Boston. — Phil Niles, Tom Joyce, Blackie Black, Bill Northrop, Charlie Billman, Joe McCarthy, and many more are working in New York. We really can't monopolize all of the space in *The Review*, so will save something for the next issue.

Please feel free to drop me a line any time, either to send in news or to find out about any one. — S. R. SPIKER, *Secretary*, Piqua, Ohio.

'26 Lewis Major Sanford died in Louisville, Ky., in December after an illness of three months. It is hardly necessary to recall his career at the Institute, so well known was he to all members of the Class. As pole vaulter on the track team for four years, he distinguished himself by winning first place in the 1925 New England Inter-collegiate Pole Vault, at the same time breaking the Institute record for that event. Later he won second place in the I. C. A. A. A. Meet. He entered his freshman year, took Course II, and was a Kappa Sigma. The Secretary speaks for all who knew him in expressing the sorrow that prevails throughout the Class.

At the Annual Dinner of the Alumni Association, solemnized January 7 at the Boston Chamber of Commerce, seventeen members of the Class appeared with their ears washed and their hair well smeared with iguana grease. They were: C. H. Barry, Richard Briggs, B. G. Constantine, R. T. Dawes, Howard Humphrey, R. J. Martin, John McMaster, L. B. Merrick, C. C. Ogren, A. W. Peterson, C. M. Dickett, Jr., W. F. Rooney, R. W. Sherman, D. K. Taylor, F. M. Toperzer, Cedric Valentine, and der Konvergenzpunkt.

But that is not the only assemblage on the slate for this month. We have it from our New York correspondent that on December 14 the New Yorkers, sixteen strong, gathered at the Old Canteen Club at 71 Irving Place for a corn-shucking. It is claimed that the following attended: Al Bassett, Sam Cole, Bob Flaxington, M. L. Grossman, Herb Kaufman, Elmer Knight, George Leness, I. R. Macdonald, Ted Norton, E. L. Perry, D. A. Peterson, G. R. Peterson, Bob Richardson, E. E. Staples, and Win Wingate.

Now that these divers occasions have been properly preserved in literary aggregate we shall hie ourselves to lovelier things. Dave Shepard on Wednesday, December 28, married Miss Katherine Berney Fisher at Denver, Colo. After February 15 they will be at home at Baton Rouge, La. Der Konvergenzpunkt with all its eight cylinders and improved supercharger, and despite its newly installed centrifugal governor raced violently upon getting this announcement. It hereby sets off in behalf of the Class several blasts as a presidential salute from its artificial larynx. But Dave is not alone in the celebrating, for he must share the limelight with Jiggs Rogers, who verified our recent announcement of his engagement. On January 21 at the Little Church Around the Corner in New York he married Miss Rosamond Hoyt Lefavour.

A letter from Elmer Knight announces that he too will soon require several salutes. He is engaged to Miss Helen F. French of Orange, Mass. A letter from Dick Rothschild

tells us of his galloping around to different jobs in the Alabama Power Company system. He states that his only stable address is 1 Mabry Street, Selma, Ala. What do you mean stable?

And now to more readable news, the modest homilies of the Course Secretaries. With rings on their fingers and red on their nose, they make music of their immaculate prose. — J. R. KILLIAN, JR., *General Secretary*, Room 3-205, M. I. T., Cambridge, Mass.

COURSE II

This month's crop of news items is largely due to a letter from Don Chase, reporting for himself and fellow workers at Kelly-Springfield, as well as for others that have come within his ken. At Cumberland, Roy Copley and Ray Bete have spent the period since graduation with Don in the engineering department. Ray was married on August 18 to Miss Ethel A. Peterson of his old home town and is now to be addressed at the Washington and Lee Apartments, Cumberland, Md. Although our congratulations are rather belated, I'm sure Ray will find them no less sincere or hearty. He has very recently been made assistant to the head of the tire design department which sounds like a step up the ladder.

Roy Copley has spent most of his time on machine design work with some machine layout thrown in. Don's labors have been chiefly along the lines of plant layout, structural design, and power plant work. He has recently been running around the country preparatory to the installation of a large refrigerating plant for his company.

Apparently the lure of the open road and a humanitarian desire to prevent its romance from being rudely dissipated by an ominous hiss or the pop of a blowout has inspired a number of Course II men into the building of better tires. Out in Akron, for instance, Larry Randall and John Oakley are keeping Goodyear abreast of the times and matching the M. I. T. impetus Kelly-Springfield has secured. Fisk has secured the services of Art Benson and the duPont's were employing Dick Connet in their end of the rubber game until a severe illness forced him to give up his job. He is now working on Venturi meters at the Builders' Iron Foundry, Providence.

Andy Lambertus has also had a bad break in the form of acute appendicitis, but is back in the harness again now for the Ames Shovel Works, North Easton, Mass. He is reported to be supporting a Whippet Coach.

Dick Avery has stuck to his job with Stone and Webster and is now the overlord of a gang of scrubbers. Pete Jerardi is an inspector for Hudson-Essex in Detroit. — Malcolm McNeil is living at home and working for the Factory Mutual Fire Insurance Company in Boston. I also understand that F. A. J. Brown is located in Rockford, Ill., but I have no details. — JOHN B. JACOB, *Secretary*, 1037 South Kenilworth Avenue, Oak Park, Ill.

COURSE V

Just after the Chemikersekretariat had settled down from a whirlwind trip home for Thanksgiving, and started to figure out how he could manage to buy all those Christmas presents for twenty-five per cent of listed prices, things began to happen.

The approach of unexpected events was

forecast by a letter from one J. Gill Fletcher, which pronounces the Chemikersekretariat to be one hound at smelling out news. That is, all statements in the November Review concerning Johnny are true, thanks to Sandy. In addition, he has dropped "all chemical connections" and has settled down to teach school for a year at least in Willimantic, Conn., where he and Mrs. Fletcher are residing at 97 Bridge Street. Johnny concludes with a threat to become our ablest itinerant by making a trip around the world in the near future, so you may be taking a chance by writing, but I know he'd be glad to hear from us after being out of touch for so long.

Comparatively soon after the receipt of this letter, two telegrams arrived bearing happy news. The first, from Eugene Augustus Chase, "Married Jean this afternoon, Chippie," announced the wedding on December 5, of Miss Jean Brebner to der Herr Meister Professor Chase. A note which followed spoke of a honeymoon trip to Chippie's home in Michigan in a newly acquired Chandler automobile, slightly worn. No further details are available at present except that the newlyweds are living at 5 Riverside Apartments, Penns Grove, N. J. There might have been more to say had not a careless maid packed a second wire, carrying an invitation for New Year's, among some unimportant papers on our library table. We didn't run across it until we were looking for more lemons for the January 2 lemonade.

The second wire was no ordinary piece of news, nor yet was it an ordinary telegram, Western Union or Postal Telegraph, but a Babygram, and this from the modest and retiring assistant superintendent of Mr. Eastman's Black Paper Plant at Rochester, N. Y. Joan Baxter was born December 7, winning the baby shoes for Course V. Joan and her parents are living at 56 Maplewood Terrace.

This great rush of news completely upset our equilibrium, so that our Scotch tendencies in regard to Christmas presents became submerged, making us very broke; consequently, the soup ladle and baby shoes are still in Macy's. — I. R. MACDONALD, *Secretary*, 74 Irving Place, New York, N. Y.

COURSE VII

At last! After a period of about two years, the entire membership of Course VII has been heard from. Even with such a wonderful record as this behind our Course, it behooves me when I am called upon to make the additional statement that twenty-five per cent of these communications consisted of Christmas cards. In short, that simmers down to the fact that a card was received by me from one member of our noted class of four, as the first communication since graduation. May that card, which notified us that George Cummings is still alive, transform itself into a letter which will give us some interesting news and information concerning his activity since his apparent removal from civilization.

From the City of Bluefield, W. Va., comes some news from Leonard Phelps. He is finding that health work calls upon all of one's resources and in fact all of the knowledge that one has ever obtained. He states that the mountains about Bluefield are quite interesting, and in fact, fascinating. I just wonder if that has any hidden meaning?

1926 Continued

With the satisfaction of having heard from all of my coursemates, I send this brief account to press, with the hope that more news will be forthcoming which will necessitate far greater space than this little insertion. — E. M. HOLMES, *Secretary*, 22 Bates Road, Watertown, Mass.

COURSE IX

This is an answering gurgle to the recently issued "cry in the wilderness" for Class Notes. Rhyne Killian suggested fact or fiction. We respond, worthy Konvergenzpunkt, with a bit of historical romance, sending along our apologies for not having been able to overcome the mental, moral, and physical desuetude which prevented our using the following choice bits while they retained their pristine news value.

Harry Jenkins, who left the Institute in 1923 to study at the New England Conservatory of Music, is now organist at the St. George Theatre in Framingham, Mass. He expects shortly to be transferred to one of the theatres in Boston. — Choong Myung Ko is with the Passaic Consolidated Water Company, Paterson, N. J., gaining experience in Sanitary and Hydraulic Engineering. Eventually he will return to the Orient to practice what is now being preached to him.

Malcolm MacDuffie sends us a very cheerful letter in which he admits to being happily married to Margaret Fincke of Wellesley, '25, and to having a job leading downy-lipped sophomores through the current English courses at the Institute. — Ed Bray is with the M. W. Kellogg Company in New York City designing stills. Just what kind he does not say. Overcoming the temptation to inflict a number of still-born jokes on the assemblage we will pass on.

B. V. Howe is operating an experimental sewage purification plant at the Cranston Print Works, Cranston, R. I., for Weston and Sampson, Consulting Engineers of Boston. Before taking this job he was with the Massachusetts Department of Public Health, examining water supplies. He writes that he saw Southworth and Topez some time ago in Boston, both of whom were with the Metropolitan Water Commission.

Yours truly is still engaged in a personally conducted venture in general contracting. My ears have dried, but my shoulder blades are loose at their moorings in a newly-rising flood of adversity, due to the deeply rooted superstition that the winter is no time to build. As to future reports, cablegrams from countries not as yet heard from will be appreciated. — JAMES BAKER BAMFORD, *Secretary*, 519 Walnut Street, Reading, Penna.

COURSE X

Dear old Adam of Adam, Eve, and Company was the first to voice that time honored expression, "No news is good news." Taking, then, this profound statement of our renowned ancestor as the basis of our argument, the good fortune of our classmates is beyond the realm of the most fertile imagination. Having agreed then as to our bases and suppositions, your scribe is no longer eligible to follow the flights of fancy, but must relate the news he has had from those of our less-successful brethren who still can write.

Our dear old Bruce Humphreville has written a most interesting letter of his ex-

periences during the past six months. Bruce has graduated from the School of Insurance, and is now, strictly speaking, a real chemical engineer in the employ of R. G. Knoland, Consulting Chemical Engineer. Bruce has managed to return to Boston, and is finding his work most enjoyable with the additional attraction of having a whale of a good time in and about Boston. Hoppie has also made exactly the same change with Bruce and is actively engaged again this year with doing all he can to make the 1928 Tech Show a howling success.

Dear old Willie McCornark is back at Technology registered in the Class of 1928, and is also taking up quite a bit of his Master stuff so that things won't be too heavy during the next year.

In spite of my preliminary remarks, I do not feel that it would be amiss to speak a little seriously in closing. The news has been very scarce of late, and there certainly must be a lot of real interest to the Course as a whole if you boys would only send it in. — LEE CUMMINGS, *Secretary*, 211 Genesee Park Boulevard, Rochester, N. Y.

COURSE XIV

News! Gentlemen, news! General John has done what most of you combined have been incapable of doing. He has reported your doings to the Coursesec in a lengthy type-written treatise which I met with huzzahs and other sundry shouts of acclaim. I shall tell you of things as he has told them to me. Good old Minsk is in the Patent Office in Washington; although the procedure there is not yet revolutionized, there are rumors that he and Cal are "just like that" (put your third and index finger tightly together), so I judge that we may expect developments. Last news from Frank Romanoff left him touring in a repossessed Chevrolet. He made it clear that he is not on a honeymoon. He is still stationed at Great Falls.

Keniston is still in Boston, while Erwin, who finished up this past summer, is also in Boston. — The eminent Dr. Draper, man of affairs, a scholar and a gentleman, a judge of beautiful women, good liquor, and fine race horses, is still engaged in doing nothing as he says. Nevertheless, the departments are fighting for the privilege of having him do "nothing" for them. He is reported in a chronic state of pessimism as usual wherein nothing means anything and morbidity should prevail. On the other hand, he is as rotund as ever and knows all about everything and can either integrate or differentiate it.

There you have it. It seems that all our pay checks are coming on time, no catastrophes threaten, and "great joy prevails" throughout the whole works. More power to all of us, then, in the New Year. — MARRON W. FORT, *Secretary*, State A. and M. College, Orangeburg, S. C.

'27 John B. Drisko, weary from studying the stream-flow of water under bridges and of beer under bridgework at Technische Hochschule in Danzig, sought solace in his copy of the January Review; found therein several inconsistencies in the '27 Notes; and wrote twenty pfennigs worth of interesting postal card to tell me about

them. Says Herr Drisko: "Although I sent a letter to Lee Miller through your office only a day or two ago, the January Review received today promotes, or provokes, a bit of scribbling. The advent of a Christmas package, sent from Boston December 7, helps to put me in a good mood. It contains a plum p. — p. for pudding — and I hope that I can get it through customs tomorrow. Everything in Danzig except the air has to go through customs — and that usually smells pretty strong of cheese and beer.

"Now! I failed to find notes on Nap Davidson and Sally Barker in the Montana Club Notes. Am I English, or is it my eye-sight?" And, after inquiring about Frank Crandell and Amund (Count) Enger, Johnny closes with proof of his grasp upon the subjunctive mood by remarking nonchalantly, "Gott sie Dank, the days are getting longer." Frank Crandell, by the way, appears to be one of the nixes and the Count whose home is in Oslo, Norway, is somewhere in the vicinity of Dresden, Germany.

Explaining the charge, The Review Editors tell me that the notes from the Secretary of the Montana Club for the January Review were recalled, whereupon one whole section — twelve inches of it — describing a second dinner was "killed." Davidson attended, and Barker, being in Boston, was represented by his father. The Club fondly refers to Sis and Nap as its "1927 Muckers."

And now that that important matter is settled, there are two dinners that need mentioning. The Annual Dinner of the Alumni Association reported by the Department of English in the February Review brought out nineteen '27 men whose names, thanks to the first three mentioned, follow: Ike Swope, Phil Rugg, Marshall Jennison, Jack Boyle, Freddy Brucker, Joe Burley, Bob Doten, Harry Franks, Jim Henry, R. E. McCassey, Ham Moineau, G. G. Morrill, Al Reed, Boot Peirce, Charles C. Smith, Jerre Spurr, Ezra Stevens, and This Secretary. Ike also lists an "Andy Anderson," an auburn-haired chap, but it wasn't Carl, Ned, or Andrew. I can't place him. — The dinner in New York referred to by Jake Rabinowitz in the Course I Notes failed to materialize according to last minute advices from Jim Lyles.

George Houston suggests that each Course Secretary publish all changes of address, but, as I told him, it would take up too much space in The Review. This Secretary and any of the Course Secretaries will, however, gladly furnish any addresses and forward mail to any of the fellows for whom they have addresses. — JOHN D. CRAWFORD, *General Secretary*, Room 3-205, M. I. T., Cambridge, Mass.

COURSES I AND XI

For the last few months I have been getting reports that Jake Rabinovitz was still among the living, so to eliminate any doubt, Jake sent a little note. He seems to be one of the fortunate ones who can boast of both a business and a residence address, although I am not sure which is which. Here they are: 277 Pennsylvania Avenue, Brooklyn, N. Y., and — or Hall of Records, Room 614, New York City. Jake wants to become an Active Alumnus, so that is something worth while. The gang in New York City, that is, as Jake

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says, "Jack Dunn, Powell, Gary, Fitzpatrick, Greenough, Jim Lyles, and a great many more, are going to have a reunion on January 17, and expect to have a good time." Just so they don't reenact Class Day. [Senior Picnic? — J. D. C.]

Ed Chase sends a short note. I wish he had elaborated upon his work, and said more about himself. Don't be so modest next time, Ed. He and G. E. Thomas are with the Metropolitan Water Supply at Holden, Mass. Mail addressed to that city will reach him.

I dropped into the Technology Club in New York last week and met Grushky, whom some of the fellows will remember from Summer Camp. Shorty Newell stayed there a short time on his way back to Boston, and it seems Shorty is looking for, or has, a new job. George Fexy, Alan Beattie, and Hiram Benami have registered there recently. Benami's address is 215 Rochelle Avenue, Wissahickon, Penna.

Paul Ivancich is succeeding in placing the Philadelphia and West Chester Traction Company among the foremost railroads of the country. Ivy spent Christmas in Boston. He never did like the city and swore to stay away, but some girl must have changed his plans. He didn't give any details, but said he had a "hectic time."

Carl Redd, who is with the Louisville and Nashville Railroad Company, crashes in, and sends a letter on railroad stationery. Redd says that he intends looking over some of the local girls in southern Alabama, as his luck up around the Boston Navy Yard has left him. Also, "Hurricane, Ala., is not nearly so desperate a place as the name indicates. It has all the cultural advantages and the extreme remoteness of dear old East Machias. As I live practically on the bridge, these charms are wasted on me. By the way, you slighted my bridge by allowing it only one pier, whereas there are three, two of which are now almost completed. I am getting to be a first class 'sand hog' as the chief engineer has requested a daily visit into the working chamber. Well, I have no wife, so why worry?"

That completes the write-ups for this month. I should like to see about twenty-five fellows surprise me and write me all the dope they can about themselves. — LEE MILLER, Secretary, 18 Park Street, Cortland, N. Y.

COURSE II

Larry Littlefield and Ruth Harriman, of Newburyport, Mass., announced their engagement at a dinner party during the last holiday season. Miss Harriman was a Wheelock, '24, and Boston University, '26, girl. Larry writes that he is an electrical engineer with the Eastman Kodak Company in Rochester, N. Y. When I read that, it reminded me that the rest of us ought at least to become fairly proficient mechanical engineers. Larry is doing research and development work in connection with the Ciné-Kodascope. He writes that he has seen Dick Hawkins in Rochester, and that Dick was planning to start on a trip around the world in January. Best of luck to you, Dick, and congratulations to you, Larry.

After reading so many rumors about himself in this column, Charlie Hurkamp decided to put a stop to them and tell us all

about himself. Incidentally, Dame Rumor proved to be such a helpmate in this case that your Secretary may start rumors about other Course II men soon. Charlie says it is all too true that he is in St. Louis. To quote: "Last June, a few days after the degrees were thrust upon us, Johnny Melcher and I drove out here, and ever since then I have been working hard for the company which so generously donated this paper. [Bemis Brothers Bag Company was the name adorning the letterhead.] Stetson, also of Course II, is here working in the same department. My first job was to aid and abet in motorizing one of the company's cotton mills. That lasted about four months and now I am working on machinery layout drawings and plant data." Charlie is evidently getting some very good experience on factory layout.

While perusing the January issue of the S. A. E. *Journal* a few days ago the following announcement caught my eye: "Arthur J. Reardon received the appointment of mechanical draftsman recently in the Ordnance Department at Watervliet Arsenal, Watervliet, N. Y."

Harold Dahl has been located in the wilds of Wisconsin through a letter sent to Charles DeFazio: "... working in an experimental laboratory at the National Gauge and Equipment Company playing around with the things I always liked and getting paid for it. This is a pretty little city and I think I am going to like it a whole lot better than New York." He is at 950 Cass Street, LaCrosse.

J. D. C. informs me that Marcus P. Robbins is working on motor bus transportation with the American Water Works Company, and his address is 14 Wood Street, Pittsburgh, Penna. The following excerpt from his letter to J. D. C. may be of interest: "The transportation game especially in the field is the opposite of any other. Saturdays, holidays and early and late are the big times. Not so bad for me as the busses are on the road and I'm working mostly on maintenance, though now and then I'm out watching the performance and how they're operated. My experience and interest in automobiles is a great asset in helping me make a place, as it were, for myself in the organization. I've spent most all my time except for a couple of months at Morgantown, W. Va."

Ham Moineau got so tired of seeing Larry Coffin's name in this column that he sent in some news about himself. I was very glad to hear what Ham was doing, but I am afraid Larry cannot be crowded out of the column so soon because he moves around so much. Ham is working for the Marlboro Wire Goods Company, Marlboro, Mass., and says his work varies from "pounding the typewriter to designing and setting up machinery." He spent the Saturday before Christmas with Frank Staples, who is with the York Manufacturing Company in York, Penna. I have also heard that Don Wylie is with the York Manufacturing Company.

Moineau notwithstanding, Larry Coffin has been sent by the Goodyear Company to Phoenix, Ariz., to take charge of a tire testing station there. He is to wear out the tires on two Packard straight eights, so the story goes as told by Moineau and checked by a letter from Tom Knowles. Tom writes that Larry spent New Year's Day in Juarez, Mexico. If your Secretary's geography serves him cor-

rectly, Mexico is one of these countries untouched by the horrors of prohibition. I sympathize with your peregrination, Larry.

While I am down near the Mexican Border, it will be fitting to say something of Lt. Frederic Glantzberg, who is in the Army Flying School at Brooks Field, Texas. A voluminous letter dated January 8 impressed me with the thoroughness of the training down there. After Fritz finishes at Brooks Field, following a program of accuracy, night, formation, and cross-country flying, he will be transferred to Kelly Field for training in all the late types of Army planes.

A miniature 1927 reunion was held in Detroit on Monday, December 26, when At Witham, George Onishi, Bill Richards, X, and myself spent a very pleasant afternoon reminiscing. The three gentlemen mentioned journeyed to Detroit for the Christmas week-end from South Bend, where they are employed in the research laboratories of the Studebaker Corporation. An argument on the relative merits of General Motors cars and Studebaker cars waxed hot for awhile, but I was outnumbered three to one and was forced to surrender, temporarily at least. At is working on riding qualities and George is studying performance.

I would like to put in a good word here for local alumni associations, if the Detroit Association is a fair sample of the various local groups. On the evening of January 9 I was heartily welcomed to the monthly dinner of the Detroit Association and heard a very interesting talk. I met George Darling at the dinner. He is with the Detroit Health Department. I hope I shall have as much news for you in the April issue. — DAVID R. KNOX, Secretary, 4506 Allendale Avenue, Detroit, Mich.

COURSE IV

This column has been silent the past months and I guess you fellows know the reason why. Hereafter I'm going to make up stories about you and if you don't like them — well just write and tell me so.

A letter from far-away California found its way to the office a while ago from our friend Lyons. Henry, as you know, is with the Firestone Tire and Rubber Company and was stationed at Akron, Ohio. He writes of his trip to Los Angeles and says: "We drove out here over the road from Akron by way of the Old Santa Fe Trail, stopping a day at the Canyon and had a fine trip. This is God's country, Tom, golf, palm trees, grass, and broken-down movie actresses all the year around — you can't beat that combination. In a couple of months I am going to take in Tia Juana, as I will be at San Diego." Henry is certainly seeing the land!

Speaking about traveling, yours truly has resigned his position with the Metropolitan District Water Supply Commission and is now associated with the Portland Cement Association in the Boston District office. After attending a week's conference of the Eastern Field and Office Engineers of the Association at the Commodore, New York City, I took a jaunt down to the City of Brotherly Love to spend a week-end with our old friend Patterson. He greeted me like a long lost brother, and a very pleasant reunion was enjoyed, I assure you. Pat is with Turner Construction Company and is a timekeeper in a large bank

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building in Philadelphia. "Quite a difference," he says, "in having those nine o'clock classes that I used to cut and being on the job at seven A.M. until six P.M." While the Alumni in Boston were enjoying their Annual Dinner Pat and I were reunioneing over a nice dinner in Philadelphia.

Our friend, Sailor Cahill, has forsaken the practice of Architecture as a protégé of C. Burnham and is now on the engineering staff of the Boston and Albany Railroad at Boston. — Shelburne Falls, Mass., is the temporary headquarters, I understand, of F. S. White, who is now on the payroll of Jackson and Moreland. Whitey, they tell me, is doing hydro-electric work. Power to you, F. S.!

Bill Duffy dropped into the office the other day and we had a wonderful talk. Bill, up to now, has been with the Massachusetts Highway Commission as Construction Inspector of Roads. He is taking a vacation now after seven months strenuous labor.

Let's hear from the rest of you fellows, Kuhns, Rousseau, Bourbeau, Peraner, White, Seigel, all of you IV men and we'll have some real news for the column next month. — THOMAS E. HEGARTY, *Secretary*, 9 Mount Vernon Street, Somerville, Mass.

COURSE V

Stuart Bugbee is still doing some electrical testing with the Diamond State Fibre Company. Besides, he is proceeding with research on gears, the kind that are a boon to an inexperienced woman driver, when shifting in a traffic jam. — Decker has at last been heard from. He resides in Montgomery, Penna., where the Montgomery Table and Desk Works employs him. All of the *n* Deckers assist the company. His knowledge of chemistry often plays a vital part in his work of setting piece rates in the numerous departments.

Eddie Dunn is trying out various photographic plates put out by Eastman to obtain some distinctive metallographic pictures of annealed copper at high magnifications. He hopes, if the gods are willing, to obtain a Master's degree this summer. — EDWARD T. DUNN, *Secretary*, 205 East Stoughton Street, Champaign, Ill.

COURSE VI

At last the mystery has been cleared up. Duke Weller is not married. He informs me that I am fortunate that he has a good sense of humor, but what worries me is that such a pointed attack required such a long time for an answer. What is wrong with my weapon? Duke has been doing a lot of traveling since graduation. His first job was with the Amrad Company in Medford, where he inspected radio sets until December. He then enrolled in the student engineering course with the General Electric in Lynn, which also failed to hold his interest. He is now teaching electrical subjects in the Mechanic's Institute at Rochester, N. Y., where he claims he is "following in the footsteps of Professor W. H. Timbie, and how." But the wanderlust is still with him, for he announces that next summer he is going to bum his way to Europe. He wishes me to extend an invitation to anyone interested to join him in the trip, and also requests that anyone in Rochester drop in to see him at the school or at 223 South Fitzhugh Street, where a cordial welcome will be waiting.

Roger Peirce has also been heard from. He is with the American Steel and Wire Company in Worcester, where he is second assistant to the head of the testing department. He remarks that when he saw the high voltage display in Pittsfield last spring, he never expected that he would now be engaged in just such work.

And now for an official report on a semi-official dinner and second balcony party held here in Boston on the evening before New Year's Eve. Those present included Bill Sullivan, Pete Peterson, Frank Massa, Earl Payne and myself, and much of importance was discussed. Earl was fresh from the Smoky City and much enthused over Westinghouse, but not so much over the city itself. His password is "Motors by Westinghouse — rugged and durable," and he dwelt on the subject at length.

At the dinner Pete announced his engagement to Miss Mary Payne, Earl's sister. The wedding will take place in the spring though the exact date has not as yet been decided. We congratulate Miss Payne on her choice and extend to the couple our very best wishes for success and happiness. Pete, as you know, is with Jackson and Moreland.

Frank Massa and Bill were both full of stories about the Institute, and between these and Pete's announcement and Payne's Westinghouse I could scarcely get a word in edgeways. But a fine time was had by all and, as you can now plainly see, much of importance was discussed. That is about all except that my battery charging business is beginning to exceed my expectations in spite of the fact that there is a station on every corner. My motto now is "More Batteries and More Letters." — CHARLES A. BARTLETT, *Secretary*, 258 Lamartine Street, Boston, Mass.

COURSE X

A letter arrived shortly after Christmas which was torn, folded, and generally wrecked. It looked like the lost will of some forgotten uncle, but it was not. Ed Damon had written a cheery greeting from his sunny Texas. He is working for a carbon black manufacturer in Skellytown, in the Panhandle district. Ed maintains that it is a great country even though the towns are thirty miles apart.

Secondhand information still reaches me, and here I quote it, meagre as it is. Thorne is now in the nitric acid plant of the Eastman Kodak Company as assistant foreman and Andrews is in the industrial laboratory with the same company. — Tom Barker is with the American Tar Products Company at Follansbee, W. Va. — Abe Silverman left cold New England for El Paso, Texas. There he holds forth with the American Smelting and Refining Company.

The following address will be good until June. — DONALD H. SPITZLI, *Secretary*, 338 Harvard Street, Cambridge, Mass.

COURSE XIII

Things are running along smoothly here in the thriving metropolis of Lorain, and although I cannot say that we have had a tornado lately, I can say that we have lots of snow. On January 9, I was present when Professor Tryon of the Admissions Department addressed the Cleveland Alumni Association. Only two of the Class of 1927 were present,

myself and Frank Rhinehart, IV. Frank is located with a firm of architects here [in Cleveland] and is doing well.

Several weeks ago I received a letter from Marcel Du Bois, who is now located in Montreal, after a summer with his family in the Swiss mountains. It seems that this country wouldn't let Marcel in, as the Swiss quota had already been filled, and so he was compelled to take the next best thing. He is now with the Dominion Engineering Works of Montreal.

I have also heard from Jimmy Chirurg, who is at present striving very hard to assimilate the Harvard *laissez faire* attitude and finding it more than intricate. The Technology habit is too strong to be shaken so easily.

I notice by the new membership list in the Society of Naval Architects that Dick Tingey and Otmar Praznik are recent members. Dick is with the Bethlehem Shipbuilding Corporation of Quincy, Mass., while Praznik is with the Public Service Electricity and Gas Company of Newark, N. J.

Everything is fine with the writer, and while news is slow in coming in, I think we are doing pretty well for a small course. — HENRY G. STEINBRENNER, *Secretary*, 2208 West Erie Avenue, Lorain, Ohio.

COURSE XV

This month looks rather badly for Course XV, and as I must pass off some sort of alibi for the lack of news, all I can say is that the gang must have been too busy recovering from Christmas and writing thank-you notes for Christmas neckties to remember that copy for this issue was due sometime in January. I realize that the less I write the smaller the printing bill will be for *The Review* [You're wrong, George! Remember your training on *The Tech!* — J. D. C.], but that's poor economy when it's good live news that sells the magazine and makes it worth while.

I did receive Christmas cards from many of the bunch — and I want to take this opportunity of saying my thank you for them. Still, I'd like a few letters, and I know I'll get some before next issue. I'll buy a dozen new typewriter ribbons if you'll give me a chance to use them.

Last Saturday I accidentally bumped into Anton Rosenthal in L. Bamberger and Company, "one of America's great stores." He's working there temporarily while looking around for a more permanent location. Rosy said he hadn't seen anyone he knew for quite a while.

As you probably recall, Frank Mesker, our Spirit of St. Louis, was married on January 3 to Miss Pauline Carl of Brookline. Mr. and Mrs. Mesker spent their honeymoon on an extended tour including the Grand Canyon, the National Parks, and Hawaii. They expect to be at home about March 5. Congratulations and best wishes, Frank.

It might be interesting to you fellows to know that I have now a practically complete list of the addresses of the 1927, Course XV, men so that if any of you would like to procure the address of any of his classmates, I will be very glad to comply with any requests along that line. So let me know if you can't locate any of your former buddies and I'll see if I can help. Here's hoping for more news next time. — GEORGE C. HOUSTON, *Secretary*, 612 Prospect Street, Maplewood, N. J.

News from the Alumni Clubs

Technology Club of Virginia

LEARNING that Orville B. Denison, '11, would stop over in Richmond on his trip south we held a luncheon meeting on Thursday noon, January 26, in the club rooms of the Richmond Chamber of Commerce. The notice was short, but we succeeded in getting fourteen members to attend. They were: J. Scott Parrish, '92, Aubrey H. Straus, '09, Miles Cary, '24, George W. Harding, '14, Thomas H. Gresham, '21, Merrill C. Lee, '17, William R. Glidden, '12, L. A. Boggs, '22, W. P. Gray, '92, A. W. Davenport, '23, W. C. Coker, '26, A. E. Shaw, '22, D. N. Frazier, '11, and Orville B. Denison, '11.

Mr. Denison in his own special pleasing and inimitable way was the life of the meeting. He gave us a talk on Technology of yesterday, today, and tomorrow, and also entertained us with several songs. We all agreed there was only one Dennie.

Resolutions were passed regretting his resignation, and it was unanimously voted that copies of the resolutions be sent to the President of the Alumni Association, and the President of the Institute expressing our deep and sincere appreciation of the efficient service Mr. Denison has rendered our Club and hoping that some way may be found whereby his services may be retained. — DONALD N. FRAZIER, '11, *Secretary*, 1215 Mutual Building, Richmond, Va.

The Technology Club of Rochester

The Rochester Technology Club met with the Rochester Engineering Society for luncheon on December 27. The speaker of the occasion was Richard O. Marsh, '05, who spoke on the subject of "The American Scientific Exploration Expedition to South America." Mr. Marsh, who has been a strong supporter of the Rochester Technology Club, gave an interesting talk concerning the proposed trip to the region of South America south of the Orinoco River.

The Club has decided to offer a regional scholarship beginning September, 1928, and to this end are planning an entertainment in the form of a one act play to be given by the Rochester Community Players, followed by a dance on February 10. It is planned to show a specially prepared film concerning Technology activities between the play and the dance. — C. J. STAUD, '24, *Secretary*, 203 Rutgers Street, Rochester, N. Y.

Southwestern Association of M. I. T.

The Southwestern Association has burst forth into activity and song twice since the last issue of *The Review*. The first occasion was on December 28, when we entertained three Kansas City men who are students at Technology at the present time. We have nine students there now, but only three returned home for the holidays, the three being Raymond G. Bray, '29, Fred W. Smith, '31,

and John C. Melcher, '28. The fifteen Alumni who were present turned back the pages a few years and listened to first-hand stories that indicated that even though "Tech is Hell" it is a mighty fine place. We got so much into the spirit of the thing that Henrici sat down at the piano and we roared out the Stein Song. If the students enjoyed the meeting as much as the Alumni did, they will surely accept our invitation to be with us again as soon as school is out.

The next meeting was held at the University Club on January 18. We were going to have a talk by Timanus on the general subject of water purification, but out of town business prevented him from showing up, so we turned the meeting into a general hot air session, and had a good time anyway. President Hall appointed four committees to carry on the year's work for the Association. There were twelve men present. — BRANSFORD W. CRENSHAW, '24, *Secretary*, Henrici-Lowry Engineering Company, 401 Security Building, Kansas City, Mo.

Southeastern M. I. T. Association

A Secretary is everything that Webster says he is, and more, but regard for alumni decency prevents such from entering the printed page. The undersigned horn for the local vox populi, being the advance guard for all luncheons, received his due razz at the December Luncheon No. 2, when but six ducks appeared at the Hotel Tutwiler raving for food, intellectual as well as material. Their cause was just, for the eternal custodian of the perforated liquid dispenser certainly lost the cap about noon. To add to the discomfort of the occasion, the steward had mixed orders and had not even provided chairs. Being loyal sons of M. I. T., and true to our stomachs, we did as anyone else would have done, and went to the handiest victual vender. So ended our December meeting.

But Luncheon No. 3 held on January 19 was a sound of another vibration. Thirteen heeded the warning on the card notices and kept them on their desks to remind them of the zero hour. (Other Secretaries might note that this Association gives no other notice than a card mailed two days preceding meetings. Attendance has not decreased, but trouble saved has increased.) Prexy Kelly, '13, and his aide, Viprexy Stobert, '12, came bounding in with all the vivacity of thirty-five-year-old children and in raucous tones demanded food. The others were so frightened that many tried to offer their allotments. Meat was thrown to the savage beasts and quiet prevailed.

E. P. Quigley, '88, was conspicuous by his absence, for he has not missed a chance to enliven those gathered with his stories. O. G. Thurlow, '04, and F. C. Weiss, '13, were also numbered among the missing, and someone suggested that they had taken the opportunity to practice a few new strokes. Paul Chalfoux, '02, is expected in Birmingham soon after an extended stay in Europe. Jesse Green

'25, has decided that he can make a go of landscape architecture, and has taken an office in the Educational Building in Birmingham. With the increasing number of new mansions being built on the other side of Red Mountain, he should find his new adventure rather profitable. F. G. Hamner, '24, has returned to the Alabama Power Company after serving his time at Schenectady with General Electric in exchange for a man sent here. It is reported that his nearest competitor along such lines is Colonel Lindbergh. J. E. Lockwood, '24, is cost engineer for the Dixie Construction Company on a new \$5,000,000 steam plant, and O. E. Charlton, '24, is inspecting the electrical installation in a reconstructed hydro plant for the Alabama Power Company. If that company went broke there certainly would be a heavy drain on the Division of Industrial Cooperation and Research. All destitute itinerant graduates are requested to call the Secretary and he will help them out — of the city, incognito. — RUSSELL W. AMBACH, '24, *Secretary*, Alabama Power Company, Birmingham, Ala.

Washington Society of the M. I. T.

The last meeting of the Society in December, 1927, was well attended by the local Alumni and by the following students now at Technology who were home for the holidays: Irving M. Dow, '30; James G. Bowen, '30; Albert E. Beitzell, '28; David S. Stanley, '30; John Ade Plugge, '29; Joseph F. Clary, '29; A. Gardner Dean, '31; Paul W. Keyser, Jr., '29; E. Ralph Rowzee, '30, and Ormond M. Lissak, '29.

The first speaker-luncheon for the New Year was held at the University Club on January 20, at which Captain H. C. Richardson, C. C., U. S. N., gave a very interesting talk on "overseas flight." As Captain Richardson was full of anecdotes regarding his recent flight over the Atlantic, his talk was extremely absorbing to a group of engineers whose daily tasks are of a less romantic nature.

The annual dinner was celebrated on February 6 at the Mayflower Hotel. It is hoped by the Washington Society that all Technology men who are in Washington on the dates that we hold our meetings and dinners always will make an effort to attend them. They will be welcome any time they come. — THEODORE A. MCARN, '21, *Secretary*, 1015 Fifteenth Street, N. W., Washington, D. C.

The M. I. T. Club of Western Pennsylvania

The question of raising money for dormitories at the Institute was voted to be a matter for the attention of the several classes and not of the alumni clubs at the last meeting of the Technology Club of Western Pennsylvania, January 9, in the University Club at Pittsburgh. A resolution was passed

memorializing those in charge of raising money for this purpose at the Institute that such was the attitude of local club members.

Prior to the resolution, the Club listened to a report on the subject brought in by a committee headed by Maurice R. Scharff, '09. The report advised against taking subscriptions locally for the purpose of raising a club fund for contribution to the building of dormitories, not as any opposition to dormitories, but as tending to detract from the concentrated effort it was felt that class secretaries in some cases were making and in other cases were about to make for the benefit of the Dormitory Fund.

At the same time that it urged against contributions from the club members as such, the report evidenced a willingness to assist the several class secretaries in the conduct of their campaign among the members of their classes in the Club. To this end and to transact what further business the Club may desire in the matter of the proposed dormitories, the committee was not dissolved upon the acceptance of its report, but was requested to maintain its organization.

The talk of the month was given by R. W. Chandler, '12, who had just returned from spending the Christmas holidays in Boston, and who consequently was able to give the Club some first-hand news from the Institute. Following the talk and discussion thereof and after the business of the dormitories had been finished, bridge was played. A. L. Kullman, '25, won the five-dollar gold piece first prize, and C. B. Rogers, '14, the necktie for second prize.

There is activity in the direction of the Second Annual Intercollegiate Dinner. George Whitwell, '15, is chairman of the committee responsible for this activity. There is likewise activity in the scholarship committee, of which R. W. Chandler, '12, is chairman, preparing to sort out the expected large number of applicants for this year's Rogers Prize in order to name a candidate to enter as a freshman in the fall.

The weekly luncheons are at McCreery's at 12:15 on Fridays. — A. W. SKILLING, *Secretary*, 507 Westinghouse Building, Pittsburgh, Penna.

Indiana Association of the M. I. T.

The Christmas party of the Indiana Association took place at the Athenæum Club of Indianapolis on December 15. The members are still wondering whether Santa Claus was merely having compassion on the over-worked mind of an engineer, or whether his estimate of their mental caliber was of such low degree — for the "gifts" consisted of rattles, picture-books, squealing snakes, dolls, and jumping-jacks. The meeting turned more truly to form, however, when the smooth-working Indiana political machine started operating to evolve a new crop of officers. After the smoke screen of "favorite sons" and "do-not-choose-to-runs" had been pushed aside, the following found themselves to be the luckless ones for 1928: President, Norman D. Doane, '15 (Permutit Water-Softeners); Vice-President, Dean A. A. Potter, '03 (Purdue University Engineering Schools); Treasurer, D. C. Hooper, '26, second offense (Eli Lilly and Company); Secretary, the undersigned.

The fireworks being over, Arthur I. Franklin, '98, demonstrated his prowess as "the best bootblack that Technology ever graduated" by shining the shoes of those present, using a new and higher-powered shoe polish (Venus Shoe Polish) developed by his brother and himself, both having been for many years the guiding stars of the Bixby Shoe-Polish Company. A "Rogues-gallery-graph" was then taken by Dr. W. W. Bonns, '99, the two senegambians drafted to operate the flash-light mechanism fleeing as from a ghost when the explosion took place.

Former President J. Lloyd Wayne, III, '96, supervisor of traffic, Indiana Bell Telephone Company, has been honored by the presentation of the thirty-year service emblem of that organization. He is now President of the Sciencetech Club, local engineers' association.

Colonel William G. Wall, '96, local consulting automotive engineer, was elected national President of the Society of Automotive Engineers at the recent New York Auto Show. The Indianapolis *Star* says, "The new S. A. E. President is regarded as one of the outstanding engineers in America today. He was for many years Vice-President and Chief Engineer of the National Motor Car Company of Indianapolis, and at present is consulting engineer of the Stutz Motor Car Company of America, Inc. During the war, Colonel Wall was selected by the War Department to assume charge of designing and production of armored cars and tanks. He has many mechanical successes to his credit. He designed and built the first American-made six-cylinder car, and was one of the first to delve into the possibilities of the twelve-cylinder motor. He took active part in the designing of the present Stutz eight-cylinder car."

Our new Vice-President, Dean Andrey A. Potter, '03, of the School of Engineering, and Director of the Engineering Experiment Station of Purdue University, Lafayette, Ind. was recently honored by appointment as one of the eleven members of the Advisory Committee chosen by the Department of the Interior to make a survey of the land-grant colleges of the United States, under a \$117,000 appropriation from Congress.

The local Technology association is looking forward with keen anticipation to the visit of Dennie, who will be with us on February 16, with his "bag of tricks" and his pictures of the Institute. This meeting will probably be held at the University Club, Indianapolis, but a telephone call to the Secretary at the Continental Optical Corporation, Main 6194, will bring the correct information about any of our meetings, as well as a welcome to any Technology man who finds himself in our valley. — L. WILLIS BUGBEE, JR., *Secretary*, 1402 North Capitol Avenue, Indianapolis, Ind.

Technology Club of Kentucky

On Friday evening, December 30, the Technology Club of Kentucky held what might be termed a three-phase dinner at the Louisville Country Club. In one phase it was to get an early start at celebrating the advent of the New Year. A second phase was to entertain embryonic Techmen who will probably be entering the "White-

Factory-on-the-Charles" in a year or two. The third and main phase was to get in touch with the Kentucky students now at M. I. T. who were at home for the Christmas holidays, exchange a few ideas with them thus getting the "low-down" on what is happening in Cambridge and giving them a good time. This last phase, it should be stated, was due to the enthusiasm of our able president Curtis C. Webb, '10, induced by the suggestion of the inventive Secretary-Treasurer of that mouth-filling organization, the Alumni Association of the Massachusetts Institute of Technology — in other words, Dennie, who like the poor seems always to be with us. The over-worked Club Secretaries and Presidents!

After the first phase of the meeting had been properly initiated by a very excellent libation, provided by — well, let it suffice that it was provided lest the recently-elected Anti-Saloon League dual leaders should hear of it — the Club and guests sat down to an excellent repast. Nay, it was more than a repast; it approached a feast. It was due to our noble President, assisted, it is true, by our worthy Junior Past-President, Frank D. Rash, '01.

As far as the second phase was concerned, we had three prospective Techmen with us: James Clark 3d, and Kennedy H. Clark, sons of James Clark, Jr., '90; and John Streng, son of Lewis S. Streng, '98.

We did fairly well on the third and last phase also. Three seniors accepted our hospitality and repaid it by expressing what appeared to be a sincere wish that we would not merely continue to have Christmas Holiday meetings, but also meetings in June to which the Club would invite the returning Technology students. These men were James R. Glazebrook and Robert W. Hunn of Louisville, and Charles C. Marshall, Jr., of Shelbyville. David Wood of Maysville and Theodore Hubbuch of Louisville had planned on attending, but were prevented at the eleventh hour. The Club members at the dinner got a good deal about the dormitory discussion from the three seniors, and some of the Club members got quite earnest. For a time it looked as if our two oldest active members in Louisville — James Clark, Jr., '90, and William H. McAlpine, '96 — were going to argue all night, very forcefully!

During the meeting Dennie's letter announcing his probable visit to Louisville in February was read, with resulting cheers. A large meeting is planned for that occasion to which the ladies will be invited. The Secretary having reported that he was worked very hard, the President took pity on him and appointed to assist him Charles E. Breitbeil, '22, as Assistant Secretary with specific duties to get our back-sliding members to pay their Alumni Association dues. In a recent broadcast from Dennie, Louisville was second in the percentage of members with paid up dues. We are out to head the list.

The Techmen at the dinner in addition to the three seniors were: J. A. Adams, '27; James Clark, Jr., '90; L. Ylvisaker, '27; F. H. Stover, '10; E. R. Cowen, '07; Frank D. Rash, '01; W. H. McAlpine, '96; Curtis C. Webb, '10; and D. C. Jackson, Jr., '21. — DUGALD C. JACKSON, JR., '21, *Secretary*, Speed Scientific School, University of Louisville, Louisville, Ky.

Technology Club of Lake Superior

The Technology Club of Lake Superior held a meeting at the Kitchi Gammi Club, Duluth, on Thursday, December 29, at which time several of the Alumni met with the students who were home for the Christmas holidays.

W. C. Lounsbury, '03, President of the local alumni group, was toastmaster at the banquet and delivered the principal address which was illustrated with stereopticon slides. The subject of Mr. Lounsbury's talk was the "Romance of Power, Ancient and Modern." George Palo, who is a senior in Course I at the Institute, reported for the students giving a very interesting account of the building program including the aeronautical laboratory and infirmary. He also elaborated on the new course in building construction sponsored by the Thompson Starratt Company. J. A. Noyes, '12, the Secretary, reported on the meeting of the Technology Clubs Associated at New York last June. — J. A. NOYES, '12, *Secretary*, 1507 Alworth Building, Duluth, Minn.

M. I. T. Association of Buffalo

Thomas R. Weymouth, '97, has been elected President of the Association. Mr. Weymouth is President of the Iroquois Gas Corporation of Buffalo. — Eugene L. Klocke, '19, has been elected Secretary-Treasurer. Mr. Klocke is a practicing attorney of Buffalo. — George F. Fisk, '01, has been appointed City Engineer in charge of the Department of Public Works of the City of Buffalo. — EUGENE L. KLOCKE, '19, *Secretary*, 1225 Liberty Bank Building, Buffalo, N. Y.

The Technology Club of New Bedford

The annual meeting of the New Bedford Technology Club was held in the hall of the New Bedford Gas Edison Light Company. The following officers were elected for the year 1928: William Tallman, '15, President; Arnold W. Milliken, '22, member of the Executive Committee; Charles L. Faunce, '88, Secretary-Treasurer; Professor Carlton E. Tucker, '18, Council Representative. After the reading of the reports by the Secretary, the twenty-eight members present and about thirty invited guests were treated to a fine entertainment furnished and put on by the members of the staff of the Institute with David W. Beaman as director. It consisted of three reels of moving pictures representing the progress of time in power and electricity, by the courtesy of Stone and Webster, and one reel showing resuscitation and what could be accomplished by first aid treatments. Between reels remarks were interspersed by P. C. Dickson, '24, on gas heating, Edwin H. Steele, '15, on electricity, and Orville B. Denison, '11, the Alumni Secretary, on Technology and its courses. The party ended a very enjoyable evening at the testing rooms of the Gas Company, where a number of high voltage stunts were tried out and demonstrated. — CHARLES L. FAUNCE, '88, *Secretary*, 137 Brownell Street, New Bedford, Mass.

Technology Club of Chicago

A change in the group of officers was made about the first of the year. Samuel D. Flood, '90, asked to be relieved of his duties as Vice-President. James F. Duffy, '11, accepted the promotion from Secretary to Vice-President. James B. Elliott, '25, was appointed Secretary. All of these held office until the annual meeting in April.

The Tuesday Noon Luncheons at the Electric Club, 30 North Dearborn Street, continue to be the life of the Club. Henry Kern, '90, H. Y. Currey, '02, Lonsdale Green, '87, Thomas M. Lothrop, '95, J. A. Plimpton, '22, Donald F. Yakeley, '25, Samuel D. Flood, '90, and R. D. Flood, '96, sign the register nearly every week. About a hundred others appear from time to time. These luncheons are informal. No reservation is required. Each man picks his own food from the excellent club menu. Technology men passing through Chicago should drop in.

A Smoker-Dinner will occur during President Stratton's western trip. In April comes the annual meeting. Orville B. Denison expects to come again during May. As a result of Denison's 1927 tour and the follow-up activities of Chicago Alumni, many high school boys are definitely preparing for Technology. — JAMES ELLIOTT, '25, *Secretary*, Link-Belt Company, 300 West Pershing Road, Chicago, Ill.

The Technology Club of Central Ohio

Ten members of the Technology group of Central Ohio met at the University Club on the evening of January 12 to hear Professor James L. Tryon speak on his travels in the Middle West in the interests of the Institute. The local Secretary arranged a heavy schedule of speech-making for Professor Tryon at the high and preparatory schools of Columbus where a surprisingly large interest in Technology was evidenced by questions and personal consultations. State education is so cheap here in Ohio that it is only the exceptional student who thinks much about going to an eastern school. Mr. C. E. Richards, the local President, motored Professor Tryon to Ohio Wesleyan University and to Dennison University, small arts colleges in this vicinity.

The alumni group of Central Ohio are interested in the plan of local scholarships but we are not in the position financially to give it the support necessary. This is true also of the Dormitory Fund. Our members are young married men for the most part, who are still being moved about the country and who have no resources to spare. We are with the general program of the Alumni Association in spirit, but we cannot be of much material aid. — EDWIN S. BURDELL, '20, *Secretary*, 20 South Third Street, Columbus, Ohio.

The Technology Club of New York

A great deal of interest has been shown in connection with the decision of the Technology Club of New York at a special meeting of its members held on December 20, not to renew the lease on the property at 17 Gra-

mercy Park, which expires on April 30, 1928. This will terminate the Club's nineteen-year residence in the district which has so many associations for the New Yorkers of twenty years ago. (See page 213 in *The Review* for February — The Review Editors.) At the meeting the President was authorized to appoint a committee of five members to look into the possibility of new club facilities and to render a report to the Board of Governors and the club membership. Mr. James A. Burbank was named as Chairman of the Committee, which included A. P. Mathesius, Morton Barney, James Evans, and Duncan R. Linsley. This Committee is now actively at work in connection with their report which will be rendered some time during the early part of February.

With the winter season in full swing, class dinners are proving to be as popular as ever at the Club, and have been well attended. The Class of '23 leads with an attendance of twenty-four at the dinner held in December. — Our European representative and aviation expert, Lester D. Gardner, '98, has left for another tour of Europe. — Noel Chamberlain has recently sailed for Europe to spend several months, principally in Spain. — Among recent visitors to the Club were Henry L. J. Warren, Secretary of the Class of '75, and Dean Burton, who as a good many people know, has been the active head of the campaign for funds for new dormitories. — DUNCAN R. LINSLEY, '22, *Secretary*, Harris, Forbes, and Company, 56 William Street, New York, N. Y.

Niagara Falls Technology Club

The Niagara Falls Technology Club held their outing in December at the Lookout Country Club, Fonthill, Ontario, Canada. The picnic chairman, Jake Strader, proved that a mid-winter picnic could be successful when held in the right environment. After the opening numbers, a hike was taken to Lookout Point where many claimed they could see Toronto which, in reality, was Buffalo.

Later these sixteen men enjoyed the turkey dinner prepared at the clubhouse, followed by more of the famous Canada Dry. The outing was so successful that all members voted to hold the regular summer picnic at the same place.


The Alumni, especially the Class of 1926, will be interested to know that Arthur F. Johnson has a side line. He was very successful in playing "Merton" in "Merton of the Movies," which was the second play given by the Niagara Falls Players, Inc., this season. Said the *Niagara Falls Gazette*: "Mr. Johnson made Merton just the beloved sap that Wilson intended, and if there were times when his audience wanted to kick him any such feeling was a tribute to his skill. He got the laughs and he got the tears, and what more can one ask even from a real actor, and Mr. Johnson, undoubtedly, does not set himself up as a real actor."

Our Club is also honored in having Raymond R. Ridgeway, '20, as President of the Niagara Players, Inc., this year. — R. A. MONTGOMERY, '19, *Secretary*, 946 Lafayette Avenue, Niagara Falls, N. Y.



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Books

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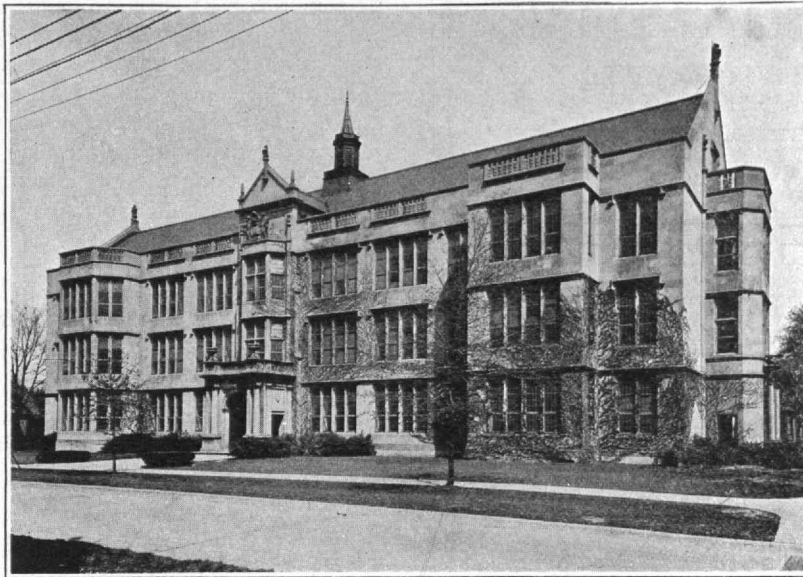
The field of usefulness of Professor Warner's new book is not confined to the aircraft industry, but one of its main uses should be the enlightening of the many inventors and aeronautical bugs who make a hobby or avocation of improving aircraft. Usually their knowledge of aerodynamics is meagre and the ideas and inventions which they expect to be revolutionary frequently turn out to be impracticable in the light of the most elementary principles of aerodynamics and physics. A book, simple enough to be read by the layman, and which, when digested, will shed some light on the science of aviation, will be a boon both to the inventor and the designer who often finds it difficult or impossible to explain to the uninitiated why some contraption will not function as anticipated.

There are some typographical errors but, considering the nature of the work, there are remarkably few. Examples are: the omission of the decimal point in two of the curves in Figure 83 on page 138; saying Figure 100 when Figure 99 was referred to on page 196; the omission of a word in the first sentence on page 198. They are all little errors in set-up or proof reading that inevitably creep in despite the exercise of the greatest possible care.

In spite of his generalities and broad interpretations there are some statements which, in the light of more recent experiments, seem to be open to some discussion. This is particularly true in the case of the flat spin treated in the chapter on spinning, the last in the book. In his second paragraph on page 549 the author enumerates the menaces that lie in the spin. He neglects to mention the most serious menace from the point of view of a really experienced pilot, that an airplane sometimes, or, more correctly, that some particular airplanes if permitted to make more than a certain number of turns in a spin cannot be stopped from spinning by the proper manipulation of the controls alone but only by moving the center of gravity forward or by decreasing the moment of inertia of the airplane about certain of its principal axes. This may be accomplished by dropping some part of the load carried. Dropping weight from the tail of the airplane has the combined effect of moving the center of gravity forward and decreasing the moment of inertia about the lateral and vertical axes. Dropping weight from the wings has the effect, primarily, of decreasing the moment of inertia about the longitudinal and vertical axes. It would, of course, have an appreciable effect on the moment of inertia about the lateral axis also if the weights did not lie exactly on this axis.

The most complete set of experiments on spinning ever carried out in free flight have recently been completed by Lt. Harry A. Sutton, '26, of the Army Air Corps. He used two of the standard type army observation airplanes and installed tanks in the tail, nose, and on each wing tip. These tanks were loaded with varying amount of small lead shots which could be dropped from the tanks whenever desired by pulling cables located in

(Continued on page 320)

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Continued from page 318

the pilot's cockpit. Through the use of these tanks, Lieutenant Sutton could vary his center of gravity location and the moments of inertia about the various principal axes at will. He found it necessary on several occasions to drop the shot in order to cause the plane to stop spinning and thus prevent a crash.

In the last paragraph on page 568, Professor Warner states that the tendency toward flat spinning might be reduced by distributing the load along the lateral axis rather than along the longitudinal. From the results of Lieutenant Sutton's experiments it would appear that this is not the case. In one of the airplanes tested a particularly dangerous condition was noted when load was added along the wings and in one particular instance it was necessary to drop the wing loads in order to recover the airplane from the spin. This resulted in a recommendation that bi-motored planes never be spun and, in spite of the decreased fire hazard, has caused the army to prohibit the placing of the main gasoline tanks in the wings of an airplane which exhibits any tendency toward flat spinning.

All in all, I believe that Professor Warner has written a book which has bridged the difficult gap between the fundamental scientific conceptions involved and the practical reduction of these principles to terms and data understandable and really useful to the airplane designer and the student alike.

JAMES-H. DOOLITTLE, S. M. '24

Hydraulics

WATER POWER ENGINEERING, by Harold K. Barrows, '95. \$6.00. 734 pages. New York: McGraw-Hill Book Company.

AS clearly stated in the preface, this work is intended primarily as a textbook, but it is written with the intention that it shall be of service to practicing engineers, and the book is printed and bound in the style of a number of the recent manuals covering features of hydraulic engineering practice.

While the limitations of a textbook must be recognized and the practicing engineer will feel some regret that fuller details and greater diversity of treatment have not been given on various points, it may be fairly stated that this work contains data covering methods and practice for the design of every part of a hydro-electric power development from dam and forebay to substation and transmission lines.

How rapidly "time makes ancient good uncouth" may easily be realized by comparing this book with those which were standard about twenty-five years ago, or shortly after the advent of modern long distance electric power transmission. At that time horizontal turbine units were the vogue while vertical units are now generally used. In books written at that time much space was given to American "stock pattern" turbines. The term "specific speed" was not in use. A draft tube was a draft tube — little was known of its hydraulics and it was manufactured rather than designed. Little more than a decade has passed since conical, expanding, elbow-type draft tubes were more or less standard practice. Today this type of draft tube is obsolete and the "stock pattern" turbine is nearly as extinct as the

archæopteryx. The distinctly American, inward flow, stock pattern turbine was the outgrowth of Samuel B. Howd's inventive genius, supplemented by the work of Francis, Swain, McCormick and others. Like the distinguished bird mentioned, it was the forefather of the best of the present generation of its kind. The latest accepted practice in relation to all features of hydro-electric power plants and their equipment can best be learned by reading Professor Barrows' book. The work is written in an appreciative style with a minimum of the trite and obvious so difficult to avoid in textbook writing.

The subject of hydrology occupies about 150 pages in the forepart of the book. There is no attempt to give a complete treatment of this subject, which is or should be covered in a separate course in advanced technical schools. Those matters of the application of hydrology which are of special utility in hydro-electric power development are, however, fairly well covered.

Excellent chapters are given on hydraulic turbines, canals and penstocks, dams, power house design and equipment, both hydraulic and electrical, speed regulation and transmission lines. There is also a full discussion of cost and value of water power, adequate to introduce the student to the economics of the subject and also well worth reading by the practising engineer. At the end of the book are excellent descriptions with numerous line drawings of typical power plants, together with nineteen pages of carefully selected problems based on the text.

ROBERT E. HORTON

Operational Thinking

THE LOGIC OF MODERN PHYSICS, by P. W. Bridgman. \$2.50. 228 pages. New York: *The Macmillan Company*.

ONCE the situation was the same as if the physicists were trying to solve a crossword puzzle — to stretch one of Professor Bridgman's similes — racking their brains in an attempt to make a philosophy to fit the inflexible definitive requirements of experiment. Then along came Einstein, who tore out parts of the old logical structure and showed how many of the previously vacant squares could be filled in. He didn't complete the puzzle, probably no one ever will, but he did demonstrate that present-day physical concepts are somehow inadequate. Says the author, "We should now make it our business to understand so thoroughly the character of our permanent mental relations to nature that another change in our attitude, such as that due to Einstein, shall be forever impossible. It was perhaps excusable that a revolution in mental attitude should occur once, because after all physics is a young science, and physicists have been very busy, but it would certainly be a reproach if such a revolution should ever prove necessary again."

Professor Bridgman suggests that instead of defining the concepts of physics in terms of their properties, they may be defined in terms of the "operations" which determine them. "We evidently know what we mean by length," he says, "if we can tell what the length of any and every object is, and for the physicist nothing more

(Continued on page 322)

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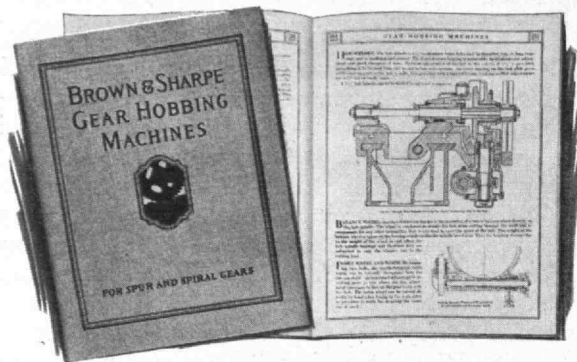
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is required. To find the length of an object, we have to perform certain physical operations. The concept of length is therefore fixed when the operations by which length is measured are fixed: that is, the concept of length involves as much as nothing more than the set of operations by which length is determined." He shows that had this operational definition of our concepts been accepted, Einstein's theory of relativity could not have caused the intellectual upheaval that it did. He then proceeds with a critique of space, time, causality, identity, velocity, force, mass, energy, and the concepts of thermodynamics and electricity, all in terms of his operational definitions.

To his physicist readers this author will be known as an able experimenter by his studies of the properties of matter at high pressures — which, perhaps, explains why his style often lacks the smoothness of the professional logician. But that need not scare away the philosophically-minded general reader; there is much in Professor Bridgman's essay that will have a meaning for him

In the Good Old Days

CANDLE DAYS, by Marion Nicholl Rawson. \$3.50. 307 pages. New York: *The Century Company*.

HERE is a book packed full of lore about the practical aspects of living during the colonial days — the candle-burning era. It is not a book about Chippendale or Windsor furniture and expensive antiques, but rather a compendious collection of information about implements of living and how those implements were made, about domestic spinning and weaving, the building of homes, the preparation of food, weather prognostications, and pharmaceutical practices.

Who knows what a pickerel jack is, a rye-an-injun bread-trough, an ox-sling? What is a dose of henbane good for? What is the recipe for hasty-pudding, for bean porridge, for Head and Puck? What was the function of a sempstress? Despite the fact that all these things were in every day use and their names in the common argot of the time when our forefathers roamed this wilderness, they hardly exist now except in books such as this.

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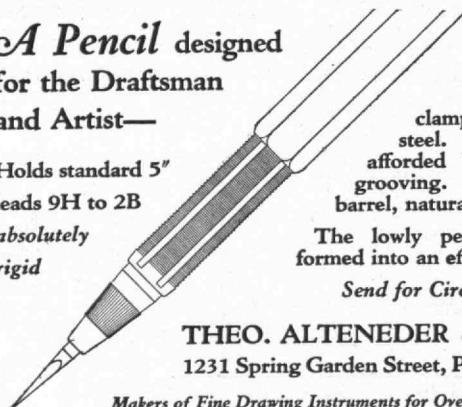
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artistry, if not science, was used in the preparation of medicine:

¼ lb. of burdock root
¼ lb. of sarsaparilla root
¼ lb. of yellow root
¼ lb. of dandelion root
¼ lb. of spikenard root
¼ lb. of red clover blossoms
1 handful hops

Stew in four quarts of water, add sugar to taste, and one half-pint of brandy.

Since there are a number of places in Boston that are pointed out as the place where beans were first baked, the following is of interest: "Baked Beans, that great gift of the red man to the white man, is a dish that has come down through the years unchanged."

Certainly the book is a feast for those interested in antiques; its author has brought a well-supported fund of knowledge to the writing of the book, though obviously the material, in the main, is drawn from New England only. The book has thirty-one pages of illustrations and is well indexed.

INDIA BY AIR, by Sir Samuel Hoare. \$2.50. 156 pages. London: *Longmans, Green and Company, Ltd.*

OLD Indiamen in the eighteenth century tacked around the Cape of Good Hope in weary, drawn-out weeks; the British Secretary of State for Air, accompanied by his Lady and staff, last winter flew in a
(Continued on page 324)

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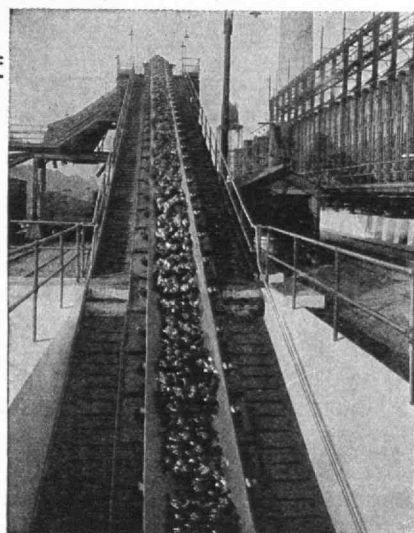


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Continued from page 323

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THE HYSTERICAL BACKGROUND OF RADIO, by R. P. Clarkson. \$2.00. 257 pages. New York: J. H. Sears & Company, Inc.

IF Mr. Clarkson's book could pass muster as the composition of a sixth-grade schoolboy, then Shakespeare wrote "Nize Baby." His jargon is unworthy of the epithet "journalism" and his acquaintance and understanding of the "backgrounds" about which he attempts to expound are extremely scanty, to put it mildly. It is "hysterical" gibberish like this, masquerading as popular science, which gives the critics of science something to talk about.

As evidence, we present the following, chosen at random: "There was René Descartes, the Frenchman, who perfected the Cartesian or descriptive geometry . . ." — ". . . Bernoulli . . . published a study of the ether which out-Cartesianed Descartes . . ." — "But it was . . . Thomas Young who really led the wavists to temporary victory . . ." — "Laplace, Poisson, and Biot took up the cudgels for the corpuscular men . . ." — "With the ether supposition of Young and Fresnel few have found fault. In general, their ether may be described as an elastic solid. Later it was somewhat liquified, at least to a plastic nature, to meet certain requirements more easily associated with fluids. . ."

Mr. Clarkson, says the jacket, ". . . writes of radio in no ordinary way." We agree, and suggest that the poor reading public offer thanks.

Textbooks

A CASE BOOK FOR ECONOMICS, by William E. Weld and Alvin S. Tostlebe. \$2.80. 508 pages. Boston: Ginn and Company.

NEW CONCEPTIONS IN COLLOIDAL CHEMISTRY, by Herbert Freundlich. \$2.00. 147 pages. New York: E. P. Dutton and Company.

ELEMENTARY PHYSICAL CHEMISTRY, by Hugh S. Taylor. \$3.75. 531 pages. New York: D. Van Nostrand Company, Inc.

GENERAL CHEMISTRY, by Thomas P. McCutcheon. \$3.50. 415 pages. New York: D. Van Nostrand Company, Inc.

THE GENERAL THEORY OF THERMODYNAMICS, by J. E. Trevor. \$1.60. 104 pages. Boston: Ginn and Company.

THE PRINCIPLES OF PETROLOGY, by G. W. Tyrell. \$3.50. 349 pages. New York: E. P. Dutton and Company.

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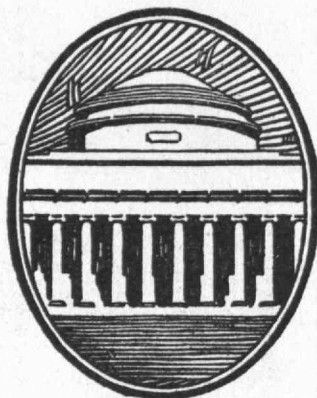
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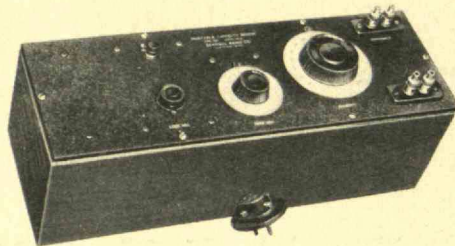
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